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Microfinance and women empowerment in Bangladesh: Impact in economic, social and political dimensions.

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UNIVERSITY OF PLYMOUTH

Microfinance and women empowerment in Bangladesh: Impact in
economic, social and political dimensions.

By

ABM Golam Mostafa

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in partial fulfilment for the degree of

DOCTOR OF PHILOSOPHY

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Author's declaration


At no time during the registration for the degree of Doctor of Philosophy has the author been registered for any other University award without prior agreement of the Doctoral College Quality Sub-Committee

Work submitted for this research degree at the University of Plymouth has not formed part of any other degree either at the University of Plymouth or at another establishment.

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Abstract

This thesis empirically examines the impact of microfinance services on women's economic, social and political empowerment in Bangladesh. Microfinance is alternative financial services for poor people, predominantly for women as they are more poverty-stricken and discriminated in Bangladesh. These services are more likely to be flexible than formal financial services so that poor women can afford and use for productive activities which can generate income either for them or for their families. Thus, women may create a chance to uplift themselves from current deprived conditions in many aspects include financial, familial, social and public life. Therefore, this thesis aims to assess whether microfinance contributes to women's empowerment, specifically in economic, social and political dimensions. A sample of 316 women clients of two microfinance institutions, Grameen Bank and BRAC in Bangladesh were selected. 285 questionnaires were completed and returned by the respondents and that constituted the data for the study. Several data analysis methods were deployed to analyse the collected data.

It has been found that women in Bangladesh are empowered economically to a certain extent by the microfinance services. Economic empowerment was measured through women's household income, savings and control over finances. Regarding this dimension of empowerment, findings of this thesis suggests the relationship of the amount of loan with household income, savings and control over finances, nevertheless, there is no relationship found with women's geographic areas (rural, semi-urban and urban). Women's engagement with income-generating activities and their long-term membership escalate the probability of increasing household income. In terms of women's savings, findings show that the larger the amount of loan, the more the probability of increasing their savings. Increase in household income and increase in women's savings are added as independent variables to assess their impact in women's control over finances. Findings show that women with increased household

income and savings have more probabilities in increasing control over finances. Likewise, women's engagement with income-generating activities intensify the probability of increasing control over finances. As far as age is concerned, middle aged women have more chance of increasing control comparatively.

Secondly, it has been found that women in Bangladesh are not socially empowered by the financial services of microfinance institutions. Social empowerment was measured through women's agency of decision-making and mobility. To assess the causal relationship, this research has deployed the amount of loan, increase in household income and women's geographic areas as key independent variables. Other variables include women's literacy and communication skills used as proxies of human and social capital. Findings of thesis suggest that both amount of loan and increase in household income are found insignificant. However, women's area is found statistically significant for both agency of decision-making and mobility. Relationship is found between women's literacy skills and agency of decision-making. Nonetheless, bizarrely, women's engagement with income-generating activities have negative relationship with their mobility. Women's agency of decision-making was used as an independent variable to assess the impact on mobility where a positive relationship is found between them.

Finally, it has been found that women in Bangladesh are not politically empowered by the financial services of microfinance institutions. Political empowerment was measured through women's community and political participation. Findings of this thesis suggest that neither the amount of loan nor the communication skills is found statistically significant. Women's engagement with income-generating activities is found statistically significant, however, it shows the negative relationship. Nevertheless, women's freedom of movement is found to have a relationship with political empowerment. The findings show that women who have disagreed

in terms of increasing mobility after joining microfinance, they have lower probability to increase their political empowerment.

This study acknowledges the importance of women's access to financial resources to their economic development and empowerment. It also highlights the importance of non-financial achievement during their involvement with microfinance such as women's human capital for their social empowerment. It infers that women's access to financial resources are fundamental for their economic empowerment, however not for social and political empowerment. With respect to the policy implication, government's policy may incorporate poor women to the public financial system so that they receive financial capital when they need. Women's easy access to resources is fundamental to the economic development of the country as they constitute half of the country's population. Microfinance institutions might consider amplifying the loan size. Following women's access to finance, policy of microfinance institutions should include stringent monitoring system so that it is actually women who are in control of the loan and utilise it in productive ways. Microfinance institutions may consider initiating additional programmes such as intense literacy, education and business development training which might be conducive for women's social empowerment. Also, inclusion of political education and leadership training would increase the political knowledge of women directly and inspire them to participate in political activities. Nevertheless, implementing these programmes will cost additional expenses, therefore, government and the donors may join the microfinance institutions to patronise these programmes for improved and resilient human resources of the country.

To the researcher's knowledge, in Bangladesh, this study is possibly the first in the literature of microfinance and empowerment which shows the impact of microfinance in multiple dimensions simultaneously. Empowerment studies were frequently studied in the context of economic dimension; however, social and political dimensions are often neglected. Only three

studies, for instance, Hashemi et al., (1996) in Bangladesh, Deininger and Liu (2013) in India and Goldman and Little (2015) in Tanzania investigated the social and political dimensions to the researcher's knowledge. Nevertheless, none of these studies did not assess the economic aspects such as impact on household income and savings through microfinance which are major indicators of economic empowerment. Secondly, this study investigates the impact of access to credit on three settings such as in rural, semi-urban and urban area to see whether there are any differences based on different locations. To the researcher's knowledge, in Bangladesh, this is possibly the first study of microfinance and empowerment in multiple dimensions that considered this variable. Thirdly, empirical studies of microfinance and empowerment in Bangladesh have rarely been analysed using economic theory while it has the potentiality to generate useful insights. This study has the application of an economic theory, for instance, women empowerment is analysed using women's fall-back or breakdown position in this study within cooperative bargaining model proposed by McElroy and Horney (1981). Lastly, findings of this study suggest that financial services of microfinance are conducive for economic empowerment, but not for social and political empowerment. Thus, this research contributes to the literature.

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Abbreviations and acronyms

ADB	Asian Development Bank
ASA	Association for Social Advancement
BBS	Bangladesh Bureau of Statistics
BDT	Bangladeshi Taka
BRAC	Building Resources Across Communities
CCTs	Conditional Cash Transfers
CDF	Credit and Development Forum
CGAP	Consultative Group to Assist the Poor
CGE	Computable General Equilibrium
CPI	Consumer Price Index
DPS	Deposit Pension Scheme
GB	Grameen Bank
GDP	Gross Domestic Products
GGs	Generalised Grameen System
GPS	Grameen Pension Scheme
MDGs	Millennium Development Goals
MFIs	Microfinance Institutions
MRA	Microcredit Regulatory Authority
NCBs	Nationalized Commercial Banks
NGOs	Non-Governmental Organizations
PKSF	Palli Karma Sahayak Foundation
PPP	Purchasing Power Parity
RED	Research and Evaluation Division
RMGs	Ready-Made Garments
SDGs	Sustainable Development Goals
SDP	Social Development Programme
UN	United Nations

Chapter 1

Introduction and outline of the study

1.1 Introduction

This thesis aims to examine the impact of microfinance services on women empowerment across several dimensions in Bangladesh. This thesis examines the impact of women's access to credit from Microfinance Institutions (MFIs) on women's economic, social and political empowerment in Bangladesh. Empowerment of women has been a key concept and integral part in development dialogue since 1990s to uplift women's status in the society. Its significance has been acknowledged by the advocacy of the United Nations (UN) for women empowerment. The third of the eight Millennium Development Goals (MDGs) is to 'promote gender equality and empower women' (UN General Assembly, 2000) while the fifth of the seventeen Sustainable Development Goals (SDGs) is to 'achieve gender equality and empower all women and girls' (UN General Assembly, 2015). Empowering women is one of the approaches to inspire underprivileged women to recognise their value and potentiality in the present patriarch society. Empowerment invigorates the self-esteem, confidence and autonomy in women with the goal that they can distinguish their ability, set an objective, see aptitudes to choose their way tranquilly in their private and social life. Around 3.73 billion of the world's population is women (World Bank, 2017). Unequal opportunities for women do not only inflict damage on women's welfare, but also detrimentally impacts the overall development of the world, since the genuine potentiality of women is left from being harnessed. Women empowerment is fundamental in fostering economic independence of those who rely upon their husbands or other family members for their daily bread, thus expose themselves to the likelihood of abuse. However, understanding the significance of women's cooperation to the economy, numerous instruments have infiltrated as an exit strategy to overturn women's

vulnerable circumstances. Microfinance is one of them what has been perceived mechanism of economic development as well as for women's empowerment (Corsi & Angelis, 2017; Angelucci et al., 2015; Augsburg et al., 2015, Hashemi et al., 1996; Pitt and Khandker, 1998) through working for social causes in developing economies by enhancing the financial prospects and living conditions of individuals. Microfinance practitioners and policy makers have floated towards the view that concentrating on women is the best intend to convey broader social advantages (Ngo & Wahhaj, 2012). Poverty reduction is the driving force behind the ascent of microfinance as poverty is the most significant factor behind the disempowerment of women. Poverty has the perspective of lacking fundamental capacities and privileges to satisfy the essential needs and necessities of individuals. Fighting against poverty is the primary option to empower women and therefore, women need to have admittance to the financial and non-financial resources, social and spiritual intends to build up their capacities. However, the traditional banking system disregard in offering access to credit, savings and insurance, especially poor people are the victims of it. For this conventional system, poor people are considered as high-risk customers because of the nonappearance of information with respect to their financial activities. Rao and Priyadarshini (2013) mentioned that formal financial sectors fail to go to the poorer because of asymmetric information, moral hazard and enforcement problem. On contrary, microfinance exhibits ingenuities in both the business and development with its services where poor people, specifically women are prioritised. This programme has leapt forward by exhibiting a range of financial and social development services to poverty-stricken women where they are not required to give any physical collateral.

1.2 Research background

In Bangladesh, a large percentage of women are unable to participate in the household decision-making process in light of male's domination. Around 85.80% households are headed by male in Bangladesh (BBS, 2017). Particularly, male prevalence is outrageous in villages of

Bangladesh and along this line, women struggle as far as economic solvency, employments, education and social participation are concerned. In terms of economic engagement, only 36.4% women account for labour force participation (BBS, 2017). Also, they are not usually allowed to join the activities in the community, which restricts their social engagement. These conditions stem from women's inability to make financial contribution to the household because of neither owning any property nor cash. On top of this, they do not have any access to financial resources on the ground of not having any collateral. Other reasons are cited as lack of necessary documentation including contractual and informational structure and poor credit score restrict them to have an account (World Bank, 2016). Approximately, 2 billion people do not have any basic account and 59% of adults do not have any bank account because financial services are not affordable by low income people. Among them, around 1.3 billion are reported to be women, who are denied any account at a financial institution including banks, co-operatives, credit union and post-office (UN Women, 2015) while in Bangladesh, horrifically 65% of unbanked adults are women (Global Findex, 2017). Therefore, economy is exacting its revenge in light of their absence through its low yield as most of the women are not able to generate any income. This total process of denying women from access to financial resources fails to give them authority over other resources, shrink their autonomy of decision-making and freedom of movement. Alongside economic and social aspects, women's participation is also negligible in political activities. For instance, in Bangladesh, it is reported that only 13.9% of women are involved with the national politics (Panday & Li, 2014). Lower participation is expected where women are always discouraged to get engaged in political activities as it is assumed to be men's sphere. The quality of governance remains abysmal in Bangladesh though a slow but steady decline in poverty (Kabeer et al., 2012). Considering the vulnerable position, women empowerment has been a focal point of many development organisations across the world since the 1990s. As a part of the developmental organisations,

MFIs, predominantly focus on women to include them into the financial system so that they can start income-generating activities and improve their economic condition, thus they can fight against major obstructions they face in the male dominated society. MFIs provide small loan to those women who have neither assets nor other methods of collateral (Agbola et al., 2017) as security against the loan. Thus, women empowerment through their economic and social development became crucial elements of MFIs. It is also demonstrated by their selection of clients where more than 90% of the clients are women. For instance, Grameen Bank (GB), one of the renowned MFIs, based in Bangladesh has 96.65% women clients (Grameen Bank, 2017). In the early stages of microfinance, the idea was to provide small loans to help those who were financially disadvantaged. Nevertheless, it has been incorporating a basket of financial and non-financial services. However, providing financial access alone does not necessarily empower women, as it might not be useful for them if they do not have the capabilities to utilise the finance appropriately. Consequently, they may end up losing the investment, which may further deteriorate their economic condition, ultimately, disempowering them.

1.3 Aims and objectives of this research

This research aims to assess whether women's access to services of MFIs impacts their economic, social and political empowerment. To address the aim, this study intends to achieve following objectives:

- **To assess the impact of microfinance in increasing women's empowerment in economic dimension**

As a poverty alleviation paradigm, MFIs aim to increase client's well-being through their interventions. Poverty reduction and increased well-being demonstrate a person's economic growth. Income and savings are considered as significant indicators of

women's empowerment. These indicators have been deployed to measure economic empowerment by some studies (*e.g.* Bayissa et al., 2018; Ganle et al., 2017; Samarakoon & Parinduri, 2015; Weber & Ahmad, 2014). Therefore, this study includes women's household income and their own savings separately as dependent variables. Clients are supposed to increase their household income as they receive financial capital from MFIs, thus, increase their savings as income augmentation effect (Khan et al., 2017). Savings are supposed to increase as women are more likely to spend on asset building and keep a certain amount of money for savings (Garikipati, 2008). Amount of loan received from MFIs is deployed as the proxy of access to credit. Moreover, demographic characteristics of women are included as they might influence women's development. Furthermore, other institutional characteristics such as membership with MFI, length of membership, women's engagement with business activities and women's area (rural, semi-urban or urban) are considered. Though empowerment derives from economic development through increased income and savings, it is not always the case as empowerment is subjective in nature. Increase in household income may not impact her autonomy on household resources. Thus, some might have more economic empowerment than others depending on their household characteristics. Women's controlling power on household resources represent their economic empowerment (Garkipati, 2008). Therefore, to investigate further, this study incorporates women's control over finances as a proxy of women's economic empowerment. Here, increase in household income and women's savings are included as independent variables to find out whether these variables influence their control over finances. Other factors such as increased self-confidence and increased assets are also added as explanatory variables to check the impact on control over finances. Thus, this research achieves its first objective.

- **To assess the impact of microfinance in increasing women's empowerment in social dimension.**

Empowerment is a multidimensional phenomenon (Malhotra et al., 2005). Someone empowered in one dimension is not necessarily empowered in other dimensions. The economic and social dimensions of empowerment are different to each other. Nevertheless, economic development may not lead to automatic improvement in other dimensions (Bayissa et al., 2018). This study incorporates social dimension to find the impact of microfinance along with economic dimension. The impact of microfinance on non-financial aspects might carry more weight of women's empowerment. Here, women's agency of decision-making and increased mobility are deployed as dependent variables as the proxy of social empowerment. Factors such as women's access to credit, increased income, increased savings, demographic characteristics, ownership of assets and human capital are included to find the influence of these factors on women's social empowerment. Thus, this research achieves its second objective.

- **To assess the impact of microfinance in increasing women's empowerment in political dimension.**

Patrilineal ancestry, custom of patrilocal residence and norm of veil are the characteristics of Bangladeshi society where women's visibility in community activities and political participation are not usual. Therefore, women's political empowerment is considered as highly impactful if it happens in light of having microfinance access. However, this is not often focused by researchers or other relevant bodies so far (Alexander et al., 2016; Kabeer et al., 2012). Women's engagement with microfinance may open the doors of communication with the outside world, for instance, their interaction with the officials and the fellow members of MFIs in the

centre where they repay their loan. They also discuss about the training and institutional issues. Thus, they may increase their engagement in community which may escalate their community and political participation. Therefore, women's political empowerment is investigated separately but explanatory factors are homogenous with former objectives as only women's mobility is additionally included to the list of explanatory variables. Women's community and political participations are used as proxy of political empowerment in this study. Thus, this research achieves its third objective.

To achieve above objectives, this study formulates the following research question:

Does participation with MFIs empower women in economic, social and political dimensions in Bangladesh?

1.4 Research gaps

Bangladesh has experienced overwhelming growth of licensed MFIs (753) and thousands of unlicensed MFIs since 1990s (MRA, 2017). Unusual growth of microfinance with the objective of serving the disadvantaged people of society raises the question whether they are benediction to the society. Is the industry swelling amply because of profit incentive? If it does, then it is highly significant to reinvestigate microfinance interventions and its focus on benefits to the clients. Generally, researchers are divided in their views on the indicators of empowerment and the findings are appeared paradoxical in different countries. Some researchers reported positive impact of microfinance for women clients (Goldman & Little, 2015; Weber & Ahmad, 2014; Sanyal, 2009; Pitt et al., 2003; Schuler et al., 1998; Hashemi et al., 1996) while others reported negative impact (Swain & Wallentin, 2017; Ngo & Wahhaj, 2012; Swain & Wallentin, 2009; Garikipati, 2008; Goetz & Gupta, 1996) Also, mixed impact was reported by some research (Ganle et al., 2015; Deininger & Liu, 2013; Mahmud et al., 2012; D'espallier et al., 2011; Holovet, 2005; Mahmud, 2003). In light of conflicting and inconsistent nature of microfinance

literature in empowerment, the relationship between microfinance and empowerment is yet unclear and therefore, require further investigation (Weber & Ahmad, 2014).

Now, with respect to the research gaps for this study, firstly, most of the microfinance studies so far have concentrated on the poverty reduction paradigm in Bangladesh. Feminist empowerment paradigm has been neglected relatively by the researchers though there are some studies have been conducted on women's economic empowerment. Nevertheless, feminist empowerment paradigm is not restricted to the economic dimension where it also incorporates legal, familial, social, psychological and political measurements (Mahmud et al., 2012; Malhotra et al., 2005). Therefore, to assess the empowerment impacts, researchers must investigate several dimensions of empowerment. This research assesses the impact of microfinance on manifold dimensions of empowerment.

Secondly, in empowerment literature, political dimension is often ignored compared to the economic dimension (Alexander et al., 2016). They likewise mentioned that women's political empowerment studies account for only 19% when it was searched through Google scholar in 2015. Women frequently remain obscure in the study of the political dimension. They urged that researchers must extend the research to build up a wider vision of women's political empowerment and create measures that catch this broadness. Kabeer et al., (2012) also stated that one of the reasons of country's failure to improve the governance front is the lack of attention of NGO's on this dimension. There are notably few studies on the impact of NGOs on political dimension (*e.g.* Kabeer, et al., 2012; Hasehmi et al., 1996). Along these lines, to enrich the current literature of empowerment in Bangladesh through microfinance, this research explores the effect of microfinance on political dimension of empowerment.

Thirdly, impact of microfinance on economic, social and political dimensions of empowerment is not studied in Bangladesh simultaneously. This research is possibly the first attempt to the

researcher's knowledge. Moreover, microfinance is often studied with its impact of financial services, however, non-financial aspects such as formation of human and social capital and its possible impact on empowerment are ignored. This research has incorporated women's human and social capital to measure empowerment. Thus, this research enriches the literature of microfinance and empowerment by filling up the above-mentioned gaps.

1.5 Contribution of this thesis

Firstly, this study enriches the literature through generating evidence of the impact on multidimensional aspects of women's empowerment. Though economic dimension is frequently studied in the context of microfinance, other dimensions such as social and political dimensions are neglected within empowerment studies. Among the above impact studies in the previous section, only three studies such as Hashemi et al., (1996) in Bangladesh, Deininger and Liu (2013) in India and Goldman and Little (2015) in Tanzania investigated the social and political dimensions to the researcher's knowledge. Nevertheless, none of these studies did not assess the economic aspects such as impact on household income and savings through microfinance which are major indicators of economic empowerment. Thus, this research is distinct to others and contributes to the microfinance and empowerment literature by focusing on social and political dimension besides economic dimension simultaneously.

Secondly, this study investigates the impact of access to credit on three settings such as in rural, semi-urban and urban area to see whether there are any noticeable differences based on different locations. To the researcher's knowledge, none of the studies has considered this variable in Bangladesh. Only one study by Weber and Ahmad (2014) considered this variable in a study of financial and social empowerment, but in Pakistan. Also, their study did not examine the political empowerment.

Thirdly, this study contributes with its results. The findings of this study suggest that financial capital is a significant resource to boost up the financial health of poor households. It shows that women clients are capable to increase their household income and savings when they are given access to financial resources. Clients of BRAC are more capable in increasing their income than GB. Also, BRAC provides larger amount of loan than GB. Size of the loan is fundamental in increasing women's household income and women's savings. Thus, this study informs that the larger amount of loan facilitates the financial health of clients of microfinance. It also informs that household income increases when women are engaged with income-generating activities. Overall, this study suggests that size of the loan, women's income-generating activities, their income and savings are germane to women's economic empowerment, nevertheless, financial achievements through microfinance is not directly relevant to social and political empowerment. Women's area is a significant factor in these dimensions. Moreover, along with financial services, this research reports that, clients get the opportunities to gain non-financial achievements such as human and social capital during their membership period with MFIs. Engagement with microfinance personnel along with fellow members facilitated women with improved communication and literacy skills, and thus, they increase their self-confidence. These findings provide valuable insights to the relevant policy makers in Bangladesh about the importance of women's financial inclusion and their engagement in income-generating activities.

Fourthly, empirical studies of microfinance and women empowerment rarely been analysed using economic theory in Bangladesh while it has the potentiality to generate useful insights. It also supports in organising thoughts, clarifying phenomena, confirming steady explanations, improving forecasts and lastly, informing the design. Though unitary model of the household has been used to study intra-household decision-making, researchers have called for new models because of its enormous theoretical and empirical deficiencies (*e.g.* Alderman et al.,

1995). In this study, women empowerment has been analysed using women's fall-back or breakdown position within cooperative bargaining model proposed by McElroy and Horney (1981) which is different to the unitary model. Kabeer (1997) has used the insights of the bargaining model in urban Bangladesh incorporating women from export-oriented garment factories, nevertheless, her study was completely qualitative. The study of Osmani (2007) was conducted in Bangladesh using the mixed method with the adoption of bargaining model, however, it was limited to rural setting with lesser respondents where this study has incorporated rural, semi-urban and urban areas with larger number of respondents relatively. Another noteworthy feature of this research is that data was consciously collected on the variables that could be used as tackling the endogeneity which might stem from the self-selection by the respondents.

In a nutshell, this study enriches the literature by recognising the potential pathways of women's empowerment in Bangladesh. This study emphasises that business capital alone is not enough for microfinance clients, their intense human and social capital such as business-related education and as well as literacy skills are also important to be empowered in social and political dimensions. Thus, the findings of this research add value to the MFIs and Bangladesh government as policy makers, for further improvement of their services, specifically the size of the loan for maximum productivity to benefit millions of microfinance clients.

1.6 Structure of the thesis

Chapter 2: Chapter two represents the overview of Bangladesh in terms of its socio-economic status and microfinance industry. The first part of this chapter discusses the socio-economic issues of Bangladesh and the second part shows the microfinance industry of Bangladesh. Firstly, it shows how Bangladesh has grown over the decades from war-torn country in 1970s. Secondly, it demonstrates the factors behind its economic development, its major export commodities and change in socio-economic indicators over the years. Then, it has discussed

the microfinance industry of Bangladesh including major players, their number of clients and Then, it has discussed the microfinance industry of Bangladesh including major players, their number of clients and market share. Lastly, it has discussed about the GB and BRAC in details with their products line.

Chapter 3: This chapter represents literature review. Firstly, it illustrates the barriers women face to get access to financial services either as business capital or for other purposes. It also provides an insight of the factors what excludes women from financial markets and activities. Secondly, it discusses the brief history of microfinance and the concept of empowerment followed by the paradigms and theories of empowerment. Thirdly, it discusses about the determinants of empowerment in several dimensions. Fourthly, it shows microfinance and development in economic, social and political dimensions. Lastly, it reviews the literature of microfinance and women's economic, social and political empowerment.

Chapter 4: This chapter discusses the methodologies and methods that are applied to conduct this research. It begins with the discussion of the paradigms of philosophy and the research approach. Then, it highlights the research design includes research strategy, choice and data collection technique. Moreover, it explains the variables along with their validity and reliability. Furthermore, it illustrates the ethical issues and the ways of surveys conducted in this research. Lastly, it discusses the data analysis methods and their suitability for this research followed by the conclusion.

Chapter 5: This chapter examines the impact of access to credit on women's economic empowerment. It investigates how access to credit impact women's household income, their savings and control over finances. With the growth of microfinance operation in almost all the regions of Bangladesh, the poor women as the primary clients are facilitated with the financial access what they have been denied by the conventional financial systems historically.

However, access to financial resources as investment is a precondition to accelerate the economic growth, nevertheless, it may not work for all, specifically poor women who have lower or no human and social capital. They may not have the ability to use the finance appropriately. Therefore, this chapter investigates whether women's household income, own savings and control over finances are positively impacted because of their access to loan of MFIs. Firstly, it represents the theoretical model and conceptual framework. Secondly, it shows the methodology of the study. Thirdly, it shows the research findings followed by the discussion of the findings. Lastly, it draws the conclusion.

Chapter 6: In this chapter, this study investigates women's empowerment from other aspects, specifically, impact of microfinance services on social and political dimensions. Firstly, it represents the theoretical model and conceptual framework. Secondly, it shows the methodology of the study. Thirdly, it shows the research findings followed by the discussion of the findings. Lastly, it draws the conclusion.

Chapter 7: This chapter draws the conclusion of the whole thesis. In this chapter, it shows the empirical contribution of this research. Next, it shows the policy implications. Finally, it mentions the limitations and scope for further research.

Chapter 2

Overview of social-economic status and microfinance industry in Bangladesh

2.1 Introduction

Bangladesh (The People's Republic of Bangladesh) is established as a constitutional, secular, democratic, multiparty and parliamentary republic in 1971 after its liberation from Pakistan. Amid the next decade, Bangladesh was affected by the absence of resources and broken infrastructure, frequent natural disasters, political turmoil, military coups, and lethargic Gross Domestic Products (GDP) development what pushed a millions of individuals to live below the poverty line for years. Lack of promotion of the small family to control the growth of population have driven Bangladesh to become one of the ten densely populated countries in the world today. According to Word Bank data, Bangladesh has the population of 164.7 million as of 2017 with the area of just 147,570 square kilometres. Around 1265 individuals live in per square kilometre in 2017 while it was only 510.29 individuals in 1971 (World Bank, 2019). Along these lines, huge population has been generating many more problems including homelessness, starvation and malnutrition, poor healthcare and unemployment. In addition, Bangladesh has been encountering an unbalanced political circumstance which never let the nation to be steady until today. A series of the assassination of political leaders between 1975 and 1981 did not allow the country function smoothly (Lewis, 2011). Indeed, even the military regime could not rule smoothly as a result of spate of popular mass dissents and toppled the last military government in 1990 and set up parliamentary democracy in 1991 which was fragile, however functioning in some ways. To remain in political power has been typical for political parties in Bangladesh and subsequently, fight for the power reliably has pushed the country backwards what have been exploiting the economic growth and social progression of

the country. Moreover, control of the overseeing party influences the capacities and frameworks of the entire nation including the huge firms, Non-Governmental Organisations (NGOs) and different associations (Lewis & Sobhan, 1999; McGregor, 1989). Poverty remains a perpetual challenge in Bangladesh. Moreover, geographic location is another factor where large area of the country is low lying implies that it is under high risk of flood what causes disastrous harm to the farming, homes and livelihood consistently. Likewise, the growth of population additionally adds to the land erosion and flooding which results the low agricultural productivity.

Nevertheless, since 2000s, Bangladesh has shown high economic growth. Following the millennium summit of UN in 2000, Bangladesh agreed to work on MDGs where eight objectives were inclined to accomplish by 2015. Annihilation of extraordinary destitution and hunger was number one goal of MDGs. As per the MDGs advance report (2015), Bangladesh has shown praiseworthy progress with regards to poverty and hunger eradication. GDP growth has contributed a positive role to diminish the extent of poverty. The robust growth alongside other social indicators, for example, expanded life expectancy and lower fertility rate stemmed surprising poverty reduction from 56.7% (1991-92) to 31.5% (2010). It is more impressive now where 24.3% of the population live in destitution and 12.9% of the population are in extreme poverty (World Bank, 2017). Poverty level was estimated based on worldwide poverty line 1.90 (US\$) per day. However, since 2000 (poverty ratio was 48.5%) to 2016, it was noticed that poverty ratio was declined by 24.5% while it is just 7% fall since 2010 until 2016. Though, the poverty rate has been diminishing continually, the setback of poverty has stayed consistent over the previous years.

2.2 Bangladeshi economy and the relevant sectors

Bangladesh has been experiencing economic stability through its GDP growth since 2006 though negative fluctuations noticed in 2009 and 2010 with a fall of GDP to 5.7% and 5.5%

respectively (World Bank, 2017) despite having long term political instability, poor infrastructure, corruption, insufficient power supply, most importantly, the recession of 2008-09 (CIA, 2017). It has reached to 249.72 billion (US\$) in 2019 from 4.60 billion (US\$) in 1960 which is approximately 45 times higher (World Bank, 2019) (Appendix 1). The economy of Bangladesh has gone under major transformations in the course of last two decades. This change led through the restructuring of the economy by decreasing the reliance on agriculture, moving to industry and service sector which have translated the development where industry and service sectors contributed 28.6% and 56.3% individually to GDP in 2016 while it was 15.1% by agriculture (CIA, 2017).

Table 2. 1 Contribution to growth (%)

Indicators name	2012	2013	2014	2015	2016	2017
Growth on GDP (%)	6.52	6.01	6.06	6.55	7.11	7.28
Sectoral contribution						
Services	53.15	53.39	53.63	53.71	53.67	53.47
Industry	25.31	26.30	26.31	26.83	27.34	27.75
Agriculture	16.71	15.49	15.35	14.78	14.04	13.41

Source: World Bank (2017).

It shows service sector has been contributing more than 50% of GDP consistently (Table 2.1). The development of the service sector is related with the progress of government policy and security, development on education system, improved well-being and social work and as well as wholesale and retail trade. Additionally, repairing of the motor vehicles and cruisers adds a significant portion to the GDP. The development of industrial sector was underpinned by the manufacturing sector what accounts 70% of sector's contribution despite having more fragile growth of export. Industrial contribution is consistently increasing while it was around 10% in 1960s. The recent development in the real-estate business was observed on account of changed price of properties, reduced rate of interest on housing loans and in particular, recently sustained political stability. Agricultural sector which used to be considered as 'ace in the hole'

in the economy of Bangladesh in light of its contribution of around 60% of GDP back in 1960s. However, the contribution of agriculture constantly declining because of incessant frequent natural disasters, specifically, floods wash away thousands of hectares of crops each year in Bangladesh. For example, two consecutive floods in 2017 has affected the livelihoods of 8 million individuals in 32 districts of north and north eastern area of Bangladesh. Around 623,402 hectares of products including rice, jute, vegetables, sugarcane and chilli along with shifting crops in the hill tracts area were destroyed. Consequently, rice stocks in the government silos hit the nadir in six years prompting sharp rise in the rice price by 19.4% (World Bank, 2017). According to research department of BRAC called Research and Evaluation Division (RED) assessed the damage of floods in north eastern regions is around 60 billion (BDT) what is equivalent to 750 (US\$) million including the loss of crops, harm to cattle, buffalo, goats, sheep, poultry, loss of labour in agriculture and other activities and additional costs for treating the water-borne disease (RED, 2017).

2.2.1 The economy of Bangladesh

The economy of Bangladesh has been benefited because of recent growth in export. Export enlargement is considered as a determining factor of import capacity of a country, what identifies the extent of domestic economic activities (Hultman, 1967). Bangladesh has significantly enhanced in exporting numerous lines of products where it was restricted to raw jute and its affiliated products a decade ago. Presently, Bangladesh has a wide range of products, for example, knitwear, woven garments, medicine, chemical, frozen goods, tea, rice and so on (DCCI, 2017) (Appendix 2). Nevertheless, Ready-made Garments (RMGs) remain the biggest exporting sector. Bangladesh still relies upon the export of agricultural products which shows its dependency on agriculture. Also, 8% of GDP is contributed by the extensive export of labour force mostly to Saudi Arab, Kuwait, UAE, Oman and Qatar where 60% of total remittance originate from these nations (World Bank, 2017). In this manner, instability on

any economic sector in those nations seriously affects the remittance of Bangladesh. It has been observed that remittances declined in two consecutive years, 2016 and 2017, in light of the sharp decrease in oil costs. Also, the presentation of financial measures, for instance, tax on non-national, increment on the energy cost and rationalisation of subsidies increased the cost of living for the foreign workers.

Nevertheless, despite robust GDP growth, a large amount of population is still denied to their basic needs as a result of unequal growth in income, family consumption and food inflation. As indicated by the report of International Monetary Fund (IMF) in 2017, Bangladesh is 138th nation in terms of GDP per capita purchasing power parity (PPP) with 4206 (US\$) among 187 nations.

Table 2. 2 Ranking of Bangladesh in GDP

Items	Ranking of Bangladesh in the World
GDP nominal	43 th
GDP PPP	31 st
GDP per capita Nominal	147 th
GDP per capita PPP	138 th

Source: IMF (2018).

Besides, unemployment rate remains a challenge for Bangladesh. Unemployment rate estimates the number of individuals effectively searching for a job as a percentage of the labour force in Bangladesh. Consistent unemployment rate and bureaucracy in the formal job sector have driven millions of job seekers to approach the informal job. According to BBS (2017), roughly 2.68 million individuals remained jobless in 2016-17 which is proportional to 4.20% of the country's workforce (Table 2.3). These statistics really do not represent the genuine picture of joblessness as dominant part of the workers employed in informal sectors (85.1%) where women account for 91.8% of informal employment which incorporate wage labours, self-employed people, unpaid family labours, and contracted labours (BBS, 2017).

Table 2. 3 Labour force, household head and literacy rate in Bangladesh

Items	Percentage	Items	Percentage
<i>Labour force</i>		<i>Literacy rate</i>	
Male	80.5%	Male	76.67%
Female	36.2%	Female	71.18%
Total	58.2%	Total	73.91%
<i>Employment rate</i>		<i>Household head</i>	
Male	78.0%	Male	85.80%
Female	33.9%	Female	14.20%
Total	55.8%	Total	100%
<i>Informal employment</i>		<i>Unemployment rate</i>	
Male	82.10%	Male	3.1%
Female	91.80%	Female	6.7%
Total	85.1%	Total	4.2%
<i>Labour force participation (Industry)</i>		<i>Labour force participation (Agriculture)</i>	
Male	22.0%	Male	32.0%
Female	16.9%	Female	59.7%
Total	20.4%	Total	40.6%
<i>Labour force participation (Service)</i>			
Male	45.8%		
Female	23.5%		
Total	39.0%		

Source: UNESCO (2018); BBS (2017).

In terms of labour force of total population, approximately 58.2% of the total population is active in work in both formal and informal sectors where women labour force is responsible

for only 36.4% of total population. Though, it is less than one third of male work force, it has increased by 3% since 2010 (World Bank, 2018). Regarding the women employment, a large number of women (59.7%) are predominantly employed in agricultural sector. Only 16.9% women were found to work in the industry while 23.5% women have worked in service sector. It shows that women are moving to industry and service sectors though at a slower pace as Bangladesh also has shifted its focus from agriculture to industry and service in recent decades.

With respect to the literacy rate, population aged 15 or above account 72.91% where women represent 71.18% and men represent 76.67% respectively. In terms of household head, a very big gap is reflected by the statistics as it shows 85.8% of household headed by men where only 14.2% by women in Bangladesh (Table 2.4). As far as inflation is concerned, it is reported that 5.7% in 2017 while it was 8.1% in 2010. However, inflation has been consistently fluctuating since 1990 while it was at its highest in 2011 with the rate of 10.7%. A recent decrease in inflation has been noticed because of a decline in inflation on non-food (Table 2.4).

Table 2. 4 Socio-economic indicators of Bangladesh

Indicators name	2010	2011	2012	2013	2014	2015	2016	2017
Inflation, consumer prices (annual %)	8.1	10.7	6.2	7.5	6.9	6.1	5.5	5.7
GDP per capita (US\$)	757.67	835.78	857.34	951.88	1084.56	1210.15	1315.58	1516.51
Population growth rate (%)	1.12	1.15	1.17	1.17	1.15	1.12	1.08	1.04
Urban population (% of total population)	30.46	31.22	31.99	32.75	33.51	34.27	35.03	35.8
Rural population (% of total population)	69.53	68.77	68.01	67.24	66.48	65.72	66.96	64.1

Source: World Bank (2018).

Incredibly, inflation is evaluated to reach 6.1% in 2018 while the interest rate sits at 6.75% (ADB, 2018). It appears that the population growth is declining consistently where it shows

1.04% in 2017. Around 64.1% of the population live rurally where 35.8% of the urban population in Bangladesh as 2017 (Table 2.4).

2.3 Employment in Bangladesh

Employment is the main income source of people in Bangladesh both in formal and informal sectors. Employment and poverty are interlinked where poverty declines with the increase of employment level. Well-articulated employment strategy of a country generates a productive and decent employment opportunities so that workers from every level of education and training are offered remunerative employment. According to BBS, per capita income grew from 1,532 to 1,660 (US\$) from fiscal year 2017 to 2018 which demonstrates 8% growth of income. Bangladesh generated more than 1.15 million net jobs per year, on average, among the working age (15-64) population with the overall employment growth of 2.45% annually in between 2003 and 2016. Moreover, employment in the non-agricultural sector grew by 3.75%, also waged employment grew by 5.75% which is driven by the manufacturing job creation, mostly in urban areas and that has contributed to the growth of women employment by 4.4%. Nevertheless, during the period of 2003-2010, employment grew a significant rate of 3.1% annually that led lower unemployment and higher labour participation. But the statistics changed during the period of 2010 to 2016 where job growth fell to 1.8% annually despite per capita growth rate at 5.2% in 2010-2016 compared to 4.5% in 2003-2010. It could be explained by the reduction of the job growth in the RMGs sector which is responsible for decline in employment where jobs added per year is around 600,00 since 2010. It used to be over 300,000 jobs during 2003-2010. This slowdown on the job growth contributed to shrinking participation of women in the labour force since 2010. Limitation of exporting sectors are also the reason for not growing the employment rate while every year millions of labour force enter into the job market. Other sectors such as footwear, leather products and pharmaceuticals have shown the potentiality in terms of growth but because of less favourable investment policy

environment, they are still considered as emerging sectors (World Bank, 2017). Despite existence of large-scale manufacturing in the RMGs sector, permanent microenterprises along with household enterprises and temporary establishments accumulating 98% of all economic units in the country and half of all the jobs. Most of the enterprises offer survival earnings in the absence of formal and wage jobs. They are not well positioned to grow themselves and therefore, unable to generate jobs in the market. In this case, complex regulations and scarcity of finances are liable for confining the growth of microenterprise.

Nevertheless, this research is in accordance with the women empowerment in the context of economic, social and political dimensions. The following section represents the women's participation in education and employment.

2.3.1 Gender disparity and unproductive employment

Poverty ratio is in its declining trend, GDP growth is increasing every year, and population growth has slowed down. In all other socio-economic indicators, Bangladesh has been consistently improving though at a slow pace. Investment has been injected to improve the infrastructure, privatisation of industrial sector and capitalism approach are shaping the country's economy. Of course, the above aspects illustrate the positive image of the economy, nonetheless, how women are related to them?

Socio-cultural environment of Bangladesh contains pervasive gender discrimination. They face continuous obstructions nearly on all aspects of their lives including economic opportunity, social and political participation, in accessing to health services, controlling resources, as well as child marriage and sexual harassment. Discrimination starts from their birth and continues throughout their life. Even at home, girls are treated as financial burden since parents start to think about their marriage during puberty. Women remain one of the most at-risk social groups in Bangladesh (Bangladesh Planning Commission, 2016). For instance, 72.6% ever-married

women have experienced one or more forms of violence. Most common form of violence is controlling behaviour (55.4%) by their husband following the physical violence (49.6%) (BBS, 2016). Their mobility in the society is restricted which confines their access to livelihood, deprive them to know their surroundings as well as obstructs their recreational and social activities. Along with the limited mobility, their decision-making power is also often limited at home. In terms of education, parents send their children to school, but girls get dropped out frequently. World Bank data show that primary school enrolment was 95.1% (net) for women where it was 86.07% (net) for men in 2010. The higher enrolment for women is the excellent output of the government's stipend programme which is known as Conditional Cash Transfers (CCTs). This programme has been rolled out across the country since 1994 to increase women's educational attainment (Shamsuddin, 2015). In 2016, secondary school enrolment for men was 59.5% (net) where it was 66.6% (net) for women. In the same year, with regards to tertiary education, men were responsible for 20.30% (gross) while women enrolment was only 14.24% (gross) (World Bank, 2018). It illustrates a decline in women's enrolment in higher education. It could be explained by the early marriage of the girls in Bangladesh.

With regards to employment, despite 35% growth of women employment during last decade in the industrial sector, the number of women in the labour force is reported lesser than men in Bangladesh. According to the flagship report of International Labour Organisation (ILO), around 18.1 million women were employed until 2017 where 45.7 million men were employed during the same period. Women employment has increased by 35% from 2008 to 2017 (Appendix 3) because of their engagement with the emerging garments industry and service sectors, nevertheless, it is a low productive sector in terms of wages. Agricultural sector has employed 10.9 million women workers what is counted as 60.1% of total workforce where most of them do not have any human capital. Remaining 39.9% of women workers are engaged in industry and service sectors. Wages

remain low in Bangladesh across all the industries. Most of the jobs in which women are engaged do not need any educational qualifications. Therefore, they cannot earn more than minimum wage which was 5300 (BDT) per month (US\$ 66 approximately) (Bangladesh Economic Review, 2017). This amount was set by the government of Bangladesh and came into effect in 2014. RMGs industry of Bangladesh employs about 4 million employees where 80% of are women (World Bank, 2017). Very recently, the Government has announced a new minimum wage as 8000 (BDT) (US\$ 95 approximately) per month following the worker's demonstration where they have demanded 16000 (BDT) (US\$ 191 approximately) per month (The daily star, 2018). On a serious note, in the informal sector, women receive less than the government's fixed minimum wage where they must work from dawn to dusk.

Above discussions represent the disparity, inequality and incongruence in education and employment which heightened the destitution level, thereby prompting disempowerment of women in the country. The circumstances might have been reversed if parents changed their thought towards their daughters, for instance, if they were treated equally like sons in the family; if their mobility was not restricted. Most importantly, if they were allowed to complete their education. Women are lopsidedly affected by discrimination and poverty; therefore, it is imperative to stop victimisation of women to get rid of the shackle of the destitution as half of the population in Bangladesh are women. It is vital to know the sources of poverty. There are numerous factors which form the poverty, for example, country's economic structure, poor design of the education system, inheriting a culture of poverty, overpopulation, natural disasters, and epidemic diseases. The most critical reason for poverty is the financial exclusion. It is mentioned earlier (in chapter 1) that 65% of unbanked adults are represented by women in Bangladesh. Prohibition of financial access is one of the significant causes which limit economic development and weaken people from the financial perspectives. On the contrary,

financial inclusion is a vital apparatus to eradicate poverty what works in manifold ways, for instance, it may create opportunities for the poor to improve their lives, guaranty their security against the risk and empower them.

This research is in accordance with financial inclusion and women empowerment in Bangladesh through microfinance. The following sections delineates the microfinance programme of Bangladesh.

2.4 Microfinance programmes in Bangladesh

Bangladesh has been the victim of numerous successive catastrophes since its birth. In 1970s, for example, cyclone in 1970, liberation war in 1971, monsoon failure in 1972 and famine in 1974 ravaged the nation's economy severely. At the very beginning, the liberation war imposed nearly a total hiatus on the economy. UN remarked the post-war circumstances as *'worse than any time in the previous history of the economy'*. Food crisis in 1972 immediately aftermath the 1971 war plunged the nation into a near-famine situation triggered untold sufferings of millions of people. In addition, famine of 1974's caused the immense loss of the country because of starvation where the exact death toll is uncertain. At the end of 1974, food stocks in the government's silos plunged to the lowest point. Thus, economic activities of the nation came to a granulating halt; agriculture, the backbone of the economy was extremely hit. Millions of people were in need of humanitarian aid where the vast majority of them had no access to water and sanitation. Health sectors and hospitals were also hard hit. People had to live without adequate food, safe house and medicinal care. In 1973, Bangladesh was already a populated nation with 65 million individuals along with weak economic condition. It was so difficult to supply the essential needs of the nation with that financial condition. Microfinance programmes evolved in Bangladesh in light of these irrefutably gruesome circumstances. Another factor can be included behind the commencement of microfinance is the failure of state-owned Bank in Bangladesh (McGuire et al., 1998) as well as across the developing world

(Armendariz & Morduch, 2005). The banking sector used to be controlled by four nationalised banks which are known as Nationalized Commercial Banks (NCBs) controlled roughly 50% of the assets in the Banking sectors in Bangladesh. NCBs were built up for improving agricultural activities in the rural areas, unfortunately, genuine poor individuals remain excluded in their services. Along these lines, peasants consistently stayed needy as a result of absence of finance for cultivation including water system, fertilisers and other farming technologies. Likewise, the private business banks and other foreign banks operate in Bangladesh have maintained the distance from the rural people.

Since 1970s, credit programmes were started as NGOs with the target of economic development of people in rural regions as the concentration of poor are comparatively thicker in villages. Following the war, in 1972, BRAC began its activities to rehabilitate the displaced people returning from India. It began offering microcredit in 1974. In 1976, another MFI called GB, introduced unconventional credit structure for poor people. Even though microfinance industry began in 1970s, Bangladesh has encountered unhindered experimentation in the fields of microfinance amid 1990s. This prompt augmentation of microfinance drew attention from all important quarters, for example, legislators, academia and conventional financial institutions (Ahmed, 2009). A considerable number of MFIs have begun to spread the activities by setting up new branches across the country. Following the success of GB and BRAC, other MFIs such as Association for Social Advancement (ASA); Thenghamara Mahila Sabuj Sangho (TMSS); Basic Units of Resources and Opportunities of Bangladesh (BURO-Bangladesh) and many other emerged from different districts started to provide financial access to the poor. Likewise, the change on the products and services following the feedback from the customers and employees, MFIs have introduced other services for example, literacy programmes and skills development training emanated from the acknowledgment of the education and aptitudes as a prerequisite to be successful in entrepreneurship. In addition, the introduction of the

disaster loan as a lion share of customers became helpless to lessen the sudden impacts of disasters (Matin & Taher, 2001). Another motivation behind the rapid growth is the financial support of Palli Karma Sahayak Foundation (PKSF), which is perceived as the primary contributor to MFIs in Bangladesh alongside other foreign aids. Notwithstanding, until 1990s, the industry was intensely subsidised and donor dependent. It was anticipated that whole industry will be crumpled if the donors pull the plug. But it has been refuted as financed subsidise has diminished on an incredible extent. Flexible savings programme was triggered by GB after the damaging floods of 1988 and 1998 (Pitt & Khandker, 1998). BRAC likewise stressed the savings programme as it has lessened the reliance on credit. The expansion of this programme has radically minimised the reliance of MFIs on external donors. Over the years, according to Microcredit Regulatory Authority (MRA), the industry has been transformed from grant based small functions to loan based large operation and reached more than 29 million people in 2017 which would not be conceivable without the loan based commercial type of financing structure (MRA, 2017). Now, microfinance programmes of Bangladesh are broadly subsidised by the savings fund of the customers, cumulative surplus (profit), concessional loan from PKSF, grants from national and international donors and commercial bank borrowing.

The aggregate sum of the fund was 488 billion (BDT) in 2016 while it was 183 billion (BDT) in 2011 what represents 23% growth per year. Clients' savings are turned out to be the most significant source with the contribution of 34.93% of the fund in 2017 where it was trailed by commercial and specialised banks with 21.50%. Moreover, microfinance wholesale funding agency PKSF has contributed 7.08% at a subsidised rate. This source appears as lesser than the previous year which was 8.35%. Above all, the least significant source is found as donor's fund what was one of the key fund providers previously (MRA, 2017) (Appendix 4). The inclusion of non-financial services into the product lines are likewise helping the MFIs to grow further. Nevertheless, not all the MFIs in Bangladesh provide non-financial services in light of their

design of the infrastructure and small extent of operations (Raihan et al., 2017). According to Credit and Development Forum (CDF), around 379 MFIs have Social Development Programme (SDP) for poor, exceptionally poor and vulnerable segment of the society (CDF, 2017). SDP incorporates educational support, health instructions, water and sanitation, forestation, housing and so on. It is recognised that money alone is not enough to ease the poverty level where most of the customers of MFIs do not know how to utilise the fund and where to utilise it. Thus, the emergence of development programmes, for instance, providing training in various activities, for example, crafting, groceries, farming and other areas turn to be undeniably vital element of the MFIs in Bangladesh. As indicated by CDF (2017), the highest number of MFIs (56.08%) offered educational services and provided education-related support to the clients. While the second highest (53.92%) has given the well-being and treatment. Then 41.37% of MFIs provided water and sanitation services. Also, one of the significant objectives of MFIs is strengthening women's position and subsequently, the fourth highest number of MFIs (41.18%) have offered support for women empowerment. It is sensible to contend that non-financial services of MFIs have a positive effect in increasing income of customers. Khalily et al., (2014) mentioned that microfinance with social development services contributed 15% more income contrasted with microfinance programme with only financial products.

Microfinance industry additionally generates employment for a significant number of job seekers. Comparatively, larger MFIs are creating fundamental number of vacancies for unemployed people. According to the report of MRA, MFIs have recruited 139, 526 employees as of 2017 (MRA, 2017). Nevertheless, CDF provides different statistics regarding this. The report in 2016-17 exhibits that 510 MFIs made employment for 239,689 individuals. As of 2015, microfinance industry in Bangladesh represents a substantial consistent growth with a gross loan portfolio of 5560 million (US\$) involved 23.69 million borrowers. Also, 20.27

million contributors kept an estimation of 3869 million (US\$) around the same time (Mixmarket, 2017). In terms of GDP, microfinance contributed between 8.9% and 11.9% which was assessed on the premise of labour market. Rural microfinance contributed relatively more to rural GDP of Bangladesh what was between 12.6% and 16.6% (Raihan et al., 2015). Nonetheless, the provision of microfinance services is extremely concentrated. Most of the microfinance members of Bangladesh belong to three MFIs (GB, BRAC and ASA) which account around 20 million members (MRA, 2017). They are roughly 62% customers of all the MFIs. 91% clients (35.56 million) are represented by women, out of 39.21 million total members. It is likewise discovered 34.23 million (88%) of total members based on rural areas where just 4.9 million (12%) live in urban territories (CDF, 2017).

2.4.1 Major MFIs in Bangladesh

Bangladesh has been viewed as one of the potential markets for microfinance as conventional banking financial institutions serve only 41% of the population (Global Findex, 2017). It shows stark improvement since 2014 where only 31% of population had account with financial institutions. It reports that account ownership has risen from 35% to 65% for men while it has marginally increased for women from 26% to 36%. It demonstrates that deficiency of financial banking institutions in terms of including women into their system.

Table 2. 5 Ten majors MFIs in Bangladesh (Branches)

Name	Number of Branches	Market share (%)
ASA	3042	15.37
GB	2568	12.97
BRAC	2144	10.97
TMSS	856	4.32
BURO	802	4.05
SFDW	424	2.14
JCF	361	1.82
SSS	353	1.78
UDDIPAN	307	1.55
PMUK	296	1.50

Source: CDF (2018)

At the same time, it creates a scope for the growth of microfinance institutions. According to MRA (2017), MFIs have served 14% of total population of Bangladesh during 2016-17.

Table 2. 6 Ten major MFIs in Bangladesh (Members)

Name	Number of active members	Market share (%)
GB	9,063,422	22.96
ASA	7,577,355	19.20
BRAC	6,841,622	17.33
BURO	1,512,489	3.83
TMSS	993,304	2.52
SSS	600,906	1.52
JCF	4,90,507	1.24
SFDW	475,255	1.20
UDDIPAN	474,783	1.20
CSS	403,687	1.02

Source: CDF (2018)

Normally, MFIs have compelling monitoring and control systems to shield themselves and clients from any sort of misconduct, for example, corruption, influences to favour for credit and to get job. With 17,120 branches around the country, 783 MFIs dispensed absolute loan of 1046.12 billion (BDT) which becomes more than twofold contrasted to 2013 with 432.82 billion (BDT) (MRA, 2017). Moreover, contesting makes a competitive environment where MFIs must work on the strategic development of their products and services. Regardless of the presence of huge number of MFIs, selective players are ruling the market as far as outreach is concerned considering branches, number of borrowers, outstanding loans and effective service delivery system. For example, regarding the market share on the active members, it appears that GB has 24.31% while ASA and BRAC account for 19.05% and 14.84% respectively.

This study has sampled the clients of GB and BRAC as they are most renowned MFIs in terms of length of operation years as well as their outreach both in Bangladesh and abroad. They are considered as representative of Bangladeshi MFIs and replicated by other MFIs inside and outside the country. Following section portrays a brief history of GB and BRAC following their recent product lines.

2.4.1.1 GB and its interventions

GB is a prominent MFI in Bangladesh which originated in 1970s. It delivers loans, savings, insurance, remittance and other non-financial services to poor people, who are generally denied the access to finance from the formal financial systems. 'Microcredit' the term is introduced by GB with the vision of 'Empowering the poor' has drawn the attention globally and copied by many countries around the world. It has started its journey as an experiment project in 1976 by noble laureate called Professor Yunus, in a small village of Bangladesh Called 'Jobra'. The inception of this institution substituted the custom of the existing banking system by removing the need of security for the loan and built up an elective banking structure which is dependent on trust, responsibility, involvement and innovativeness by organising a group of five members with homogenous interest. It offers group-based lending to clients where clients' constant access to credit is linked to the group's repayment behaviour. Stringent observation of the norms of group behaviour forces the members to be financially and socially responsible. This produces stress on the whole group to monitor and force the agreements as well as helps to screen out loan defaulters. It has started providing individual loans recently, though GB was recognised in 1983 as an independent bank. Over the years, it has introduced many changes on its products and services because of the demand and competition. For instance, GB had only one product called general loans for income-generating activities until 1984. Housing loan was introduced in 1984 from the realisation that borrowers of this bank are not only landless, but also they hardly have decent place to live in the monsoon and winter. Most of their one room houses are made of either jute stick, bamboo or straw. Investing on house is very productive as decent house ensures the better health which increase the extent of productivity. In 1997, GB started offering a loan for higher education so that meritorious children of its clients can chase their objectives. In the same year, another significant feature added to its activities 'Village loan' where women are provided a small loan to purchase a phone to do talk-time business.

People who do not own any personal mobile phone, they use this talk-time service for communication. Average loan is reported as 18000 (BDT) (210 US\$ approximately) in 2000 (Grameen Bank, 2000). In 2001, GB shifted its operation to ‘Generalised Grameen System’ (GGS) that is viewed as progressively disentangled and organised with clients friendly structure what can function smoothly even in the period of disasters. It has changed its general loans to ‘Basic loan’ what can be used for income-generating purpose. Another service is ‘Flexible Loan’ which is not an independent loan; in case of any non-repayment of instalment on basic loan, clients are shifted to flexible loan as they are considered as risk. In the GGS framework, credits can be of any length depending on the contract between the customers and the bank where it used to be one-year term in the old system. In the same year, loan insurance savings fund was introduced where the interested customers are required to keep a particular amount of money in the savings account. If a borrower dies suddenly, the outstanding loan is paid from the insurance fund that is created by the interest income of the insurance account. Besides, the family of the borrowers are paid back amount deposited in the loan fund (Grameen Bank, 2001). Grameen Pension Scheme (GPS) is an attractive feature of the new system for the borrowers what is a commitment savings account based on the commercial bank’s Deposit Pension Scheme (DPS). In 2003, the most exciting initiative was the addition of struggling members programme. In 2004, GB is reported to provide micro-enterprise loans in larger margin where there is no limitation because of the demand from the borrowers for the larger loans as they themselves or their family members are engaged with businesses where more investment is needed to increase the profit margin.

2.4.1.2 GB’s products line

Following the rapid penetration of competitors and considering the products suitability, GB has introduced different products and services over the years. However, after 2001 until now,

GB remain stagnant in terms of its products line. Following are the brief description of the products of GB.

Basic loan: Basic loan is provided to those who want to invest in income-generating activities and most of the clients apply for this loan. The amount of loan is small but enough to start any micro business such as paddy husking, rickshaw purchasing, machine repairing, purchasing milk cows, goats, poultry, clothing and pottery. In generally, this loan is provided to the clients with 20% interest for three years.

Housing loan: This loan was introduced in 1984 and has become a remarkable programme. Most of the poor people in villages live in a house where they are not secured. In a country like Bangladesh, this is not ideal because of frequent natural disaster such as flood, storm and lightening. GB introduced the housing loan by considering the above situations. This housing loan is divided into three parts. They are pre-basic housing loan (design stage), basic housing loans and general housing loan. It is repayable within ten years where interest rate is 8.0%. The average housing loan is offered by GB is 13,994 (BDT) (169 US\$ Approximately) (Grameen Bank, 2017).

Education Loan: Education loan was introduced in 1997 by GB with the quest to empower the poor people of Bangladesh through education. It is offered by GB for the children of clients to continue with further studies. This loan is given with 5.0% interest rate.

Village phone loan: Members of GB stepped into the area of information technology through cellular phones. It is designed to empower women while they can connect all the inhabitants of the remote villages together through phone communication besides making profit for themselves. By the end of 2017, GB provided 2.75 Billion (BDT) to 1.80 million village phone ladies (Grameen Bank, 2017).

Microenterprise loan: There is another kind of loan available for members to purchase livestock, poultry, fisheries, agriculture, sericulture, manufacturing, forestry, trading, peddling and shop-keeping. The average size for microenterprise loan is 35061 (BDT) (424 US\$ approximately) (Grameen Bank, 2017).

Beggar's loan: Begging is the last resort for a person for survival unless she/he turns into crime. GB provides loan to beggars to lift them up from their current condition with 0% interest rate. The objective of this programme is to provide respectful life to beggars besides sending their children to school to become graduate. Moreover, this programme engages the beggars with income-generating activities so that they can live on their earnings without begging. This loan is provided for very long term and it is also flexible to repay with minimum instalment. Also, they are provided with free life and loan insurance.

Savings: Mobilisation of savings is a fundamental part of GB. It has three types of savings accounts for the clients such as personal savings account, special savings account and GPS similar to DPS. Clients can save whatever they like in personal savings account subject to weekly minimum that depends on the amount of the loan and they also can withdraw any amount subject to her recent instalment. 8.5% interest is usually offered on this savings. Special savings account is not illiquid until three years. The amount can be withdrawn after three years contingent on a minimum balance of 2000 (BDT) (30 US\$ approximately). It also pays the interest rate of 8.5%. With regards to GPS, a fixed amount, 50 (BDT) (less than one US\$) is mandatory in savings account for 5 years or 10 years period. Also, clients must have 8000 (BDT) (100 US\$ approximately) as a loan. 12% of interest is offered for ten-year term while it is 10% for five years term.

2.4.1.3 BRAC and its interventions

BRAC began its journey in 1972 soon after the liberation of Bangladesh through helping the displaced people returning home from India to Shalla, a remote and distant village at the north-eastern region of Bangladesh. According to the founder, Sir Fazle Hasan Abed, visited an area after the liberation which was extremely devastated, there were lots of houses destroyed, livestock were decimated, and the farmers did not have any ploughs. That situation was the reflection of extreme vulnerability of the poor people of then society what made him determined to initiate the rehabilitation programme initially for the refugees which was known as 'Bangladesh Rehabilitation Assistance Committee'. BRAC helped the villagers by giving them materials required for house development, restored farmland and well-being facilities. BRAC understood that activities of providing relief and house reconstruction only serve as substitute measures meeting the immediate need of the people (Lovell, 1992). Consequently, it moved its concentration to long term improvement work where BRAC began a programme in 1973 with coordinated community advancement approach in rural areas including agriculture and fisheries, education for adults, vocational training, family planning and health care. In 1974, BRAC initiated a credit cooperative programme by targeting specific group of people, namely, landless, the fishermen and women. In 1977, RED was established to evaluate research activities and directions. In the same year, BRAC shifted from community development approach towards a more targeted approach (Chen, 1991) who are considered as the poorest of the poor and those who have less than half an acre of land and live on manual labour. In terms of employment, BRAC has created 16.72% job in the microfinance industry during 2016-17 (CDF, 2017).

2.4.1.4 BRAC's products line

Likewise GB, BRAC incorporates a range of services along with credit considering the particular needs of clients, for example, rural women, landless poor, peasants, young people,

migrant labourers, entrepreneurs and also salaried workers. BRAC is utilising its 44 years of experience to design, test and adapt loan and savings products. Its clients use financial services for a range of reasons such as income-generating activities, to invest in small assets, to balance cash flows for consumption and security against any unexpected shocks. BRAC operates its activities around the country with its 2144 branches in 64 districts (MRA, 2017).

Microfinance for women (DABI- ‘Right or Demand’): Women are disproportionately excluded from financial systems and other means. This exclusion restricts them to be self-sufficient, besides make them burden to their family because of their no financial contribution. From that perspective, BRAC initiates the product called ‘DABI’ which means ‘Right or Demand’ to include women in financial system by providing collateral free loan. This credit is given to begin income-producing activities and smaller scale business, for example, crafting and rearing livestock. Moreover, this loan is provided for children’s education or for improving housing. The amount of the loan is usually 150 to 2500 (US\$) and must be repaid in weekly or monthly instalments within one year. It is extended in other countries such as Pakistan, Liberia, Myanmar, Uganda, Sierra Leone and Tanzania.

Table 2. 7 Microloans for low-income women

	DABI
Members	6.8 Million
Borrowers	2.8 Million
Total Savings	21.68 billion BDT (271 million US\$ approximately)
Total Outstanding	52.32 billion BDT (654 million US\$ approximately)
Average Loan Amount	22000 BDT (275 US\$ approximately)

Source: BRAC (2016)

Small enterprise finance (PROGOTI- ‘Development’): This loan is designed for small entrepreneurs to grow micro and small size business which helps to get strong local economy. Businesses such as poultry farms, fisheries, rickshaw mechanics, beauty parlours, and clothing are targeted by the small enterprise finance. This programme is called as ‘PROGOTI’ which

signifies 'Development'. The customers are also provided other kinds of savings products for reinvestment. Additionally, customers are facilitated from the wide network of the enterprise of BRAC. Finance for the enterprise is available for all clients across the branches. Moreover, it provides this loan to the borrowers in Uganda, Tanzania, Sierra Leone, Liberia and Pakistan.

Table 2. 8 Small enterprise loans

	PROGOTI
Borrowers	342,000
Total savings	4.72 billion BDT (59 million US\$ approximately).
Total outstanding	44.48 billion BDT (556 million US\$ approximately)
Average loan amount	176000 BDT (2,200 US\$ approximately)

Source: BRAC (2016)

Migration loan: Bangladesh has a large amount of population where people have very limited opportunities of employment. Therefore, they are intended to move overseas in quest of a job to run their families. But people here face financial difficulties to move abroad as the process is highly expensive. From this perspective, BRAC introduced a loan called 'Migration loan' for the migrant workers which is manageable and affordable. Besides, this programme checks the agreements and travel documents so that customers do not fall to the fraud victimisation. They provide a range of migration services such as pre-migration orientation and post-migration orientation. BRAC has provided funds to 128,000 migrant workers to secure a job in abroad as of May, 2015 (BRAC, 2016).

Remittance loan: The clients receive additional support from BRAC as it has introduced remittance loans to the households. It is designed for those households who extremely rely on migrant family members' income who work in abroad. Thus, households do not have to wait for the remittances as BRAC covers the gap of arrival time until the remittance arrives. Moreover, they do not need to worry about the finance to run throughout the month. They get a secure flow of money which is designed to pay back on monthly basis.

Agricultural microfinance: Agriculture is the prime earning source in Bangladesh. BRAC is always concerned to empower the farmers so that they can extend their farming activities. In terms of agricultural microfinance, BRAC has introduced three projects to help the farmers financially. Each project includes micro loans, training, support and productive input which facilitate the farmers to start their agriculture enterprises. This project strongly inspires women farmers besides men which represent gender equality. If farmers are supported financially, they can guarantee stable job, enhanced wellbeing and nourishment as well as they can progressively rely on their own production rather than exported production. So far, around 660,000 farmers were provided 280 million (US\$) over the last 12 years and 98% repayment is reported on this loan (BRAC, 2016).

2.5 Conclusion

From the above discussion, it can be concluded that Bangladesh is still an emerging economy with upward growth trends in terms of economic indicators such as GDP. However, it is still vulnerable to income inequality and over population where millions of people are waiting to enter in the job market every year. Moreover, natural disasters obstruct ongoing positive efforts of development. Relatively women's negligible participation in higher education and employment also badly hamper the economy as more than half of the populations are women. Nevertheless, it appears that ready-made garments products became the largest export industry where 80% employees are women. Therefore, women can drive the economy if they are given equal opportunities in other sectors. However, the minimum wage is too low in Bangladesh what seems to exploit the labour of women along with their potentiality. Despite the exploitation, they are bound to continue as they do not have other resources such as finance or any properties to engage in income-generating activities. The existence of MFIs in Bangladesh may provide hope to this segment of women as financial inclusion of the low-income women are the principle target of MFIs. The development of MFIs based on outreach, gradual

transformation of the products, significant increase on savings and outreach beyond the country represent the successful operation, however, it is still debatable. Therefore, the following section reviews the literature of microfinance and women empowerment in Bangladesh and other countries.

Chapter 3

Microfinance and women empowerment: A literature review

This chapter represents the literature review on microfinance and women empowerment. Firstly, it illustrates the barriers women face in accessing to financial services either as business capital or for other purposes. It also provides an insight of the factors that excludes women from financial markets and activities. Secondly, it discusses the brief history of microfinance and the concept of empowerment followed by the paradigms and the theories of empowerment. Thirdly, it presents the determinants of empowerment in several dimensions. Fourthly, it shows microfinance and development in economic, social and political dimensions. Finally, it reviews the literature of microfinance and women's economic, social and political empowerment.

3.1 Introduction

Women's rights have been unduly violated and disrespected because of existing social norms, discrimination and economic inequality across the world. This is more intense in developing countries where the root of this issue emanates from women's limited engagement with economic activities (Mishra & Sam, 2016). To illustrate, women are isolated within their household in Bangladesh where men are in control of most economic resources. For instance, only 15.2% women can control their own income (BBS, 2017) in Bangladesh. Discrimination against women is justified in light of their dependence on men as many women do not have their own income and property, little or no education, no marketable skills and even no individual identification outside the household (Schuler et al., 1996). Women are usually isolated and deprived of their social rights in Bangladesh in light of their patriarchal nature. For instance, around 86% of the households are headed by male in Bangladesh (BBS, 2017). Women are compelled to accept dependence and deprivation compared to their men counterparts. Patrilineal descent, patrilocal residence and veiling norms obstruct women to be

educated. Education for girls is considered unimportant; they are forced to get married early; expected to be shy in their law's house; asked to produce children to provide the proof of their fertility. Women are restricted to house and expected to listen to their husbands on familial and other issues. They have been always dominated by the family members on account of their inability to earn and contribute financially (Hashemi et al., 1996). In these circumstances, they may not be able to make independent decisions for their own welfare; may not have any control on any essential resources; may become dependent socially and economically on their husbands; may be unable to make any contacts and expand network. These practices lead to restricted freedom of their movement. Accordingly, there is a probability that this confinement deprives them to be economically active and generate income which shrinks their opportunity to make decision on personal, household and community issues.

Lack of access to credit and limited savings in low-income countries are held responsible by Khandker (1998) for restricting women either to embark on any productive employment or to initiate income-generating ventures. UN Women (2015) suggests that around 1.3 billion women do not have any bank account at a financial institution including banks, co-operatives, credit union and post-office. To bank the unbanked, MFIs are well known for their financial services. Microfinance has been endorsed as a solution to women's limited access to finance and assumed as an approach to shrink the poverty rate and empower women at the same time (Hashemi et al., 1996). In 2017, MFIs reached 139 million low-income clients with a loan portfolio of 114 billion dollars where 83% of 139 million clients are women. Bangladesh is ranked second among top ten countries in terms of the number of clients (25.6 million) after India (50.9 million) (Microfinance Barometer, 2018). The objective of the Microcredit Summit Campaign, a promoter of microfinance was *'to ensure that 175 million of the world's poorest families, receive credit for self-employment and other financial and business services'* (D'espallier et al., 2013). These figures demonstrate that women are at the centre of the

microfinance. Women's access to financial services provides the opportunity to generate income through their own business or existing family business. However, starting business without any bank account is difficult as owning an account facilitates the business with smooth transactions. Also, bank account is safer to keep the savings than at home. Protected and convenient place is more significant than ability to obtaining loans (Deshpande et al., 2006). From the study conducted in Uganda, they mentioned that 57% of respondents prioritised secured option of savings.

Bangladesh is one of the emerging economies on the earth. A PwC report represents that the financial yield of Bangladesh could be two-fold from 628 billion in 2016 to 1.3 trillion (US\$) in 2030, taking the country in the list of top 30 countries (PwC, 2017). Nevertheless, women's workforce has not been genuinely utilised in Bangladesh. Economic engagement and opportunities of Bangladeshi women are still low while around 50% of the population are women (World Bank, 2017). These are the consequences of the male-driven circumstances and the denial of women from the formal employment sector. Likewise, women still experience the absence of adequate access to financial and non-financial resources, proper training and skills development and modern technologies. Considering the number of women populations of Bangladesh, women empowerment is paramount importance, as it enables them to apply their potency, creativity and capacity which are instrumental for the sustainable development of the country.

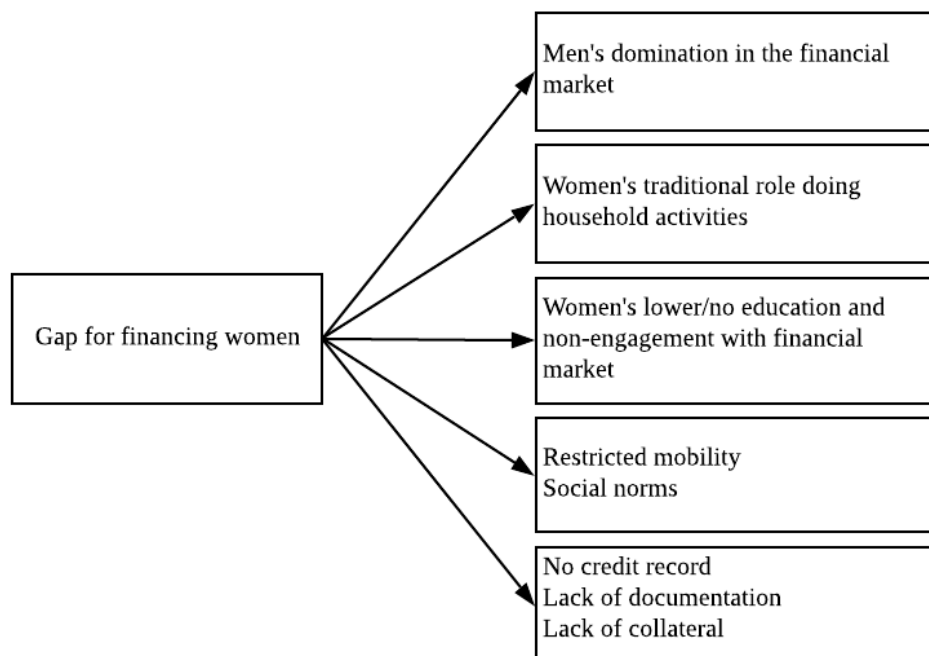
3.2 Factors behind women's restricted access to finance

Finance is a fundamental component (King & Levine, 1993; Goldsmith, 1969; Schumpeter, 1934) and banking system is an engine of the economic growth (Schumpeter, 1934). Therefore, everyone in the society must need financial access. However, it is discussed in earlier chapter that billions of people are denied access to the banking system (Chapter 1). Financial exclusion is a process that certain social groups and individuals are prevented from obtaining access to

financial resources (Leyshon & Thrift, 1995); averts poor and hinders social groups from getting access (Conroy, 2005). Financial exclusion has been also defined as a failure and inability to access to the formal financial system (Carbo et al., 2007). Conventional financial systems inherently disfavour the poor and disadvantaged groups. There are more probabilities to be left out of the financial system when an individual is poor and disadvantaged (Leyshon & Thrift, 1995). World Bank (2008) and Leyshon and Thrift (1995) unveiled some of the factors which are responsible for financial exclusion. For instance, *access exclusion* refers that households or businesses are filtered out from access through the risk assessment because of the lower income and no record of credit score. *Conditional exclusion* refers that people might not be provided finance because of not agreeing with the conditions provided by the financial institutions. *Price exclusion* denotes that the expense of the financial services what people cannot afford the services. *Marketing exclusion* refers the financial institutions' target clients where certain group become the victims of it. *Self-exclusion* where people abstain from applying for a loan because of fear of rejection. Gender discrimination is another well-known reason where, particularly, women are the victims of constrained access. This process of limiting women's access accrues negative repercussions not only for women, but also severely blocks the overall economic growth of a country. Aterido et al., (2013) also named three reasons, first, as men's domination on financial system, critical institutional framework and bank level barriers obstruct the institutional systems. Secondly, women's educational gap hinders them to gain access to finance. Thirdly, non-engagement in the formal market economy because of women's conventional role where they are supposed to do household works. The reflection of these barriers can be observed by women's lower access to finance where it is mentioned that less than 10% women are accountable for access to formal finance in south Asia (Ghosh & Vinod, 2017). Using 110,800 households of rural and urban areas in India, Ghosh and Vinod (2017) report that women headed households have 8% and 6% lesser

probability than men headed households to get access to formal and informal finance respectively. In their study of financial inclusion for women, they stated that the factors such as education and wages are more germane in explaining access to finance. Global Findex database (2014) reports significant progress in financial inclusion, nevertheless, large gap remains a concern. Many people across the world, particularly, women and poor adults do not own any account (Demirguc-Kunt et al., 2015). Their study in south Asia shows gender gap in terms of financial access is more visible (around 18%) than other regions. For instance, 43% women had account with formal financial institutions compared to nearly 63% men in 2014 in India. This study also discussed about the financial exclusion. They have mentioned the reasons behind financial exclusion such as not having enough money, owning an account is expensive and the financial institutions are in distant places.

Figure 3. 1 A gap for financing women



Source: Bin-human (2017); Aterido et al., (2013); Sanyal (2009); Fletschner (2009) and Narain (2009).

Women's individual access to credit can be affected by their own position in the financial market as well as by intra-household dynamics. Characteristics such as their wealth, human capital and collateral as well as credit record may impact women's access to financial services. A Study by Fletschner (2009) utilising married couples as respondents reported that women face more constraints than men in accessing credit and women's limiting status reacts to a different set of factors compared to men in Paraguay. She has identified some factors that affect women's ability to meet their capital needs. According to her study, women's credit rationing is more likely to be constrained by their control over household resources, bargaining power and husband's preferences. Women entrepreneurs face hindrances to have financial access and they stated that the shortage of funds is the significant barrier in initiating and growing their business (Klapper & Parker, 2011). They have identified some reasons behind women's exclusion. For instance, women's weaker credit histories what they termed as 'reputational collateral' as loans, utilities and cell phones might be in their husband's names. Women's lack of financial literacy, lack of business experience and difficulties in completing loan applications are also held responsible for their exclusion. Thus, women are more likely to rely on internal (family and friends) or informal financial resources.

Then again, women's businesses can be constrained in light of the fact that they choose not to apply for the credit as they fear that they will be rejected or the application might be too complex for them (Moro et al., 2017; Wellalage & Locke, 2017). Using a recent dataset generated by the European central bank, the study of Moro et al., (2017) shows that women-owned firms are less inclined to apply for credits than men-owned firms. It happens on the grounds that women hesitate to apply for a loan since they hope to get a dismissal from the lenders. In this case, regardless of government's regulation and financial institutions' non-prejudicial approaches, women run businesses may end up in restricted access to credit. Their findings demonstrate that the unseen fear and lack of confidence among women which lead

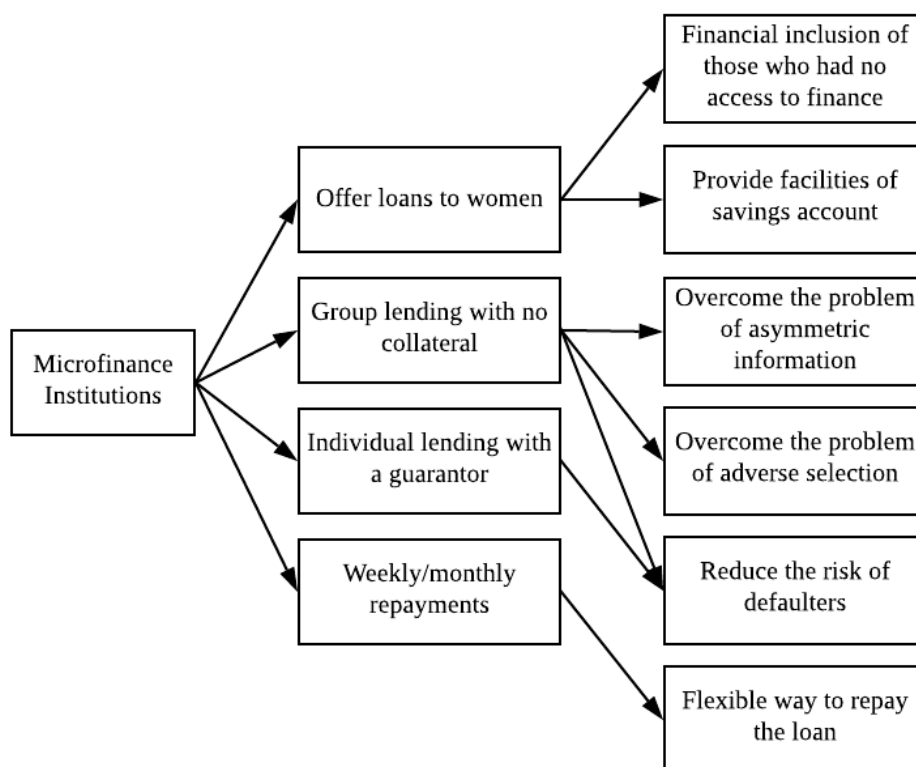
them to be self-excluded from formal financial services. Moreover, social norms restrict women to engage with financial services too where women are not encouraged frequently to have financial independence. Restricted mobility of women, even when they are not allowed to go to the village market without a company make it difficult to engage with financial institutions (Bin-human, 2017; Sanyal, 2009). Furthermore, in rural settings, it is difficult and expensive to get information about a potential borrower's creditworthiness, therefore, financial institutions may not offer loans as it seems too risky (Fletschner, 2009). Thus, women are deprived of the financial resources both from supply and demand sides. Accordingly, failure to invest on any profitable business leads them to produce and earn less; ultimately, they remain poor and live under the poverty line. To thwart women's financial exclusion, MFIs have been targeting only women to include them to the financial system. This move of microfinance was a response to further deterioration of women's status in the household and community.

3.3 The concept of microfinance

Though the term 'Microfinance' in its modern practice has the roots from the 1970s in Asia, evidence shows that this type of credit activities existed for centuries in Africa, Asia and Europe (Srncic & Svobodova, 2009). In 1720s, Jonathan Swift started making Irish loan to 'Industrious tradesmen', with the desire for developing countryside of Ireland (Roodman, 2012). Morduch (1999) asserts that microfinance of modern days has its bases in Europe. This argument is corroborated by Seibel (2003) where he mentioned that, a prior movement of microfinance can be traced back to more than 200 years ago when a casual movement of mutual help began in Hamburg. Helms (2006) mentioned that the existence of pawn shops introduced by Catholic Church across Europe in the fifteenth century while microfinance began in Africa amid sixteenth century as an arrangement of turning investment funds and credit organisations named '*ajo*' and '*esusu*'. Bank Rakyat Indonesia (BRI) was established in the nineteenth century which started giving small scale funds to the people of rural areas in Asia. Microfinance

movement in south Asia, particularly in Bangladesh has drawn the attention of the world which has started its journey in 1970s. Nonetheless, it has started expanding since 1990s across the country and received the attention of stakeholders such as donors, policy makers, developing partners and academia both inside and outside the country. Variations in market structure and operational elements since 2000, for example, development of the products line, unique delivery process, penetration of more MFIs and cost productivity have changed the usual attributes of the industry. Inclusion of savings services, insurance and remittance have changed the business what have created the scope to compete with existing formal financial system. Additionally, utilisation of technologies further has modernised the industry in terms of delivering financial products such as use of computers. Most importantly, mobile banking (Gomez-Barroso & Marban-Flores, 2014) has revolutionised the outreach process which allows to serve more clients and conduct the business operation conveniently.

Figure 3. 2 Financial inclusion of women by MFIs



Source: Author

The prevalent picture of microfinance is that of a poverty reduction instrument contrived in a creative and sustainable approach to help the underserved poor, especially in developing nations to augment entrepreneurial activities. It is also praised for aiming to cease the gender discrimination and empower women and girls (Mull, 2016; Loewe & Rippin, 2015; Weber & Ahmad, 2014).

Microfinance has been acknowledged as an instrument to facilitate the unbanked people by providing financial services. MFIs are social enterprises which aim to improve the living standard of poor people by offering the variety of services (Ahmed et al., 2013); MFIs aim to increase the access to various financial resources for the poor households and small enterprises. MFIs are categorised by Ledgerwood (1999) based on their regulatory status, for instance, formal institutions, semi-formal institutions and informal lenders. Formal institutions are obliged to follow the bank regulation and monitoring. Development and commercial banks, savings and postal banks as well as non-bank financial intermediaries are formal institutions. Semi-formal institutions incorporate NGOs, co-operatives and credit unions. They do not have to follow the bank regulations but are regulated by separate authorities. For instance, NGOs in Bangladesh are monitored by MRA while informal lenders are not registered MFIs. Self-help groups and Rotating Savings and Credit Associations (ROSCAs) are known as informal lenders. Among them, NGOs are most notable MFIs in light of their contribution to include the poor people into the financial systems.

At the initial stage, microfinance used to be known as microcredit in Bangladesh because of its focus particularly on small amount of credit. As indicated by Consultative Group to Assist the Poor (CGAP), the concept of microfinance has its underlying foundations with microcredit. The idea that small scale loan works as a business capital which is intended to help disadvantaged individuals in the informal economy to participate in productive activities to increase income and thus, find their way out of poverty. Over the previous decades, it has been

recognised that poor households require a full range of services for the increment of income, owning resources, smooth family consumption and survive against the unexpected risk where microcredit alone is not enough to fill up these requirements. Therefore, different types of loan for different purposes such as education loan, agricultural loan and disaster loan have been included in the list of products. Also, savings and insurance are added in the products line. Some researchers defined microfinance as the provision of formal financial services to 'unemployed' or low-income individuals or groups who lack access to financial products and services at reasonable price with an intention to empower poor by providing loan as business capital and services to support income-generating activities (Daher & Saout, 2017; Ledgerwood, 1999). Then, non-financial services were triggered by women's incompetency, illiteracy and lack of skills to utilise the financial resources appropriately. Consequently, non-financial services such as business development skills include training, mentoring, technical support, financial literacy, access to markets, credit counselling, networking and business incubation are added to the basket of products line to accelerate the process of empowerment of women. Researchers have conceptualised the empowerment in many ways in light of its manifold dimensional nature. Following section portrays the conceptualisation of empowerment.

3.4 Conceptualising women empowerment

Women account for 70% of the world's poor due to unequal access to economic resources across the world (OECD, 2008), however, this figure is debatable. As of 2013, approximately 783 million lived below the international poverty line of 1.90 (US\$) a day, nonetheless, the number of women and girls are still unknown (UN, 2018). According to Oxfam, women are discriminated in terms of wages where men earn 23% more than women. It will take around 170 years to fill up this gap. Moreover, 75% of women are part of the informal economy where they are more averse to be qualified to have social insurances, job contracts and legitimate

rights. The worldwide estimation of women's unpaid household is 10 trillion (US\$) which is equivalent to one-eighth of world's GDP. In addition, 700 million fewer women than men in paid work and around 600 million women in an uncertain and hazardous type of work. This gender imbalance costs women nine trillion (US\$) in the developing nations which would facilitate women with the increased capacity in the households and society (Oxfam, 2017). Inheritance of disempowerment are one of the significant reasons for the above facts. Consequently, women's empowerment is fundamental to get out of these problems. However, it is profoundly essential to get transparent ideas about the concept of empowerment, as it is multidimensional phenomenon (Mahmud et al., 2012).

Women's empowerment is referred as the ability to augment the self-reliance (Moser, 1989) capacity to determine choices (Ganle et al., 2015; Kabeer, 1994); control over conditions and resources (Batliwala, 1994; Moser, 1989); participation in households and community (Narayan, 2005); process to challenge the existing norms and culture (Swain & Wallentin, 2017); increased self-confidence (Goldman & Little, 2015); freedom and power (Ganle et al., 2015).

According to their definitions, empowerment is something that makes people self-dependent where they do not have to rely on other members of their household. They can take care of themselves in all aspects of their life without other's help. Thus, they achieve authority of any resources they have where they were denied previously on the ground of their reliance on others. For instance, authority on their own income and daily family expenditure. Similarly, authority of determining own choices such as work outside home or admission of their children in a particular school where they did not have this authority of implementing choices before. Empowerment also denotes the participation in community such as in attending the social and religious festival as well as in election whether as voters or candidates. Women's higher autonomy within the household does not necessarily empower them. Authority in cooking,

cleaning and mothering the children provides a positive change within the household, but it does not prove anything outside the households. Swain and Wallentin (2017) mentioned that women who can enhance their prosperity through breaking the current norms and culture are empowered. They emphasised that women's empowerment happens when women enhance the quality of their lives by opposing the gender-based customs and standards that reinforce gender inequality.

The concept of Goldman and Little (2015) is concise but precious to comprehend an empowered woman. They said empowered woman is the *'one who has self-confidence, freedom of her own life and control of decision-making process among other women in that particular village. She is the one who can work hard for her own activities and others follow her example. She can look after the children and her husband even if the man is drunkard. She is the one who can participate in government, NGOs and traditional meetings, and can present her ideas in front of the people, she is the one who can do her own small business and do not depend much on her husband'*. Distinct to others, they stated that *'empowerment is not just about the power of participation in decision-making, but the processes that lead individuals to believe they have the capabilities to make decisions'*.

To understand the empowerment, it is necessary to comprehend the power as it is at the centre of empowerment. Power is something that can influence and change a phenomenon positively or negatively. It is often considered as the capacity to persuade others to do something, regardless of their own interest (Weber, 1922). In this case, power means influence and control. However, power has both positive and negative perspectives for its implementation. For example, 'power to' refers people's ability to change the current status to pursue their own goals through influence and control. On contrary, 'power over' refers the ability to change others' status through influence and control, perhaps using violence and threat. Nevertheless, 'power to' is relevant to the concept of women's empowerment. Empowerment is very

complex in nature because of its use in different disciplines and arenas, for instance, economic, psychology, social, familial, community, studies of development organisations and social movements. However, power remains at the centre regardless of its use in different dimensions.

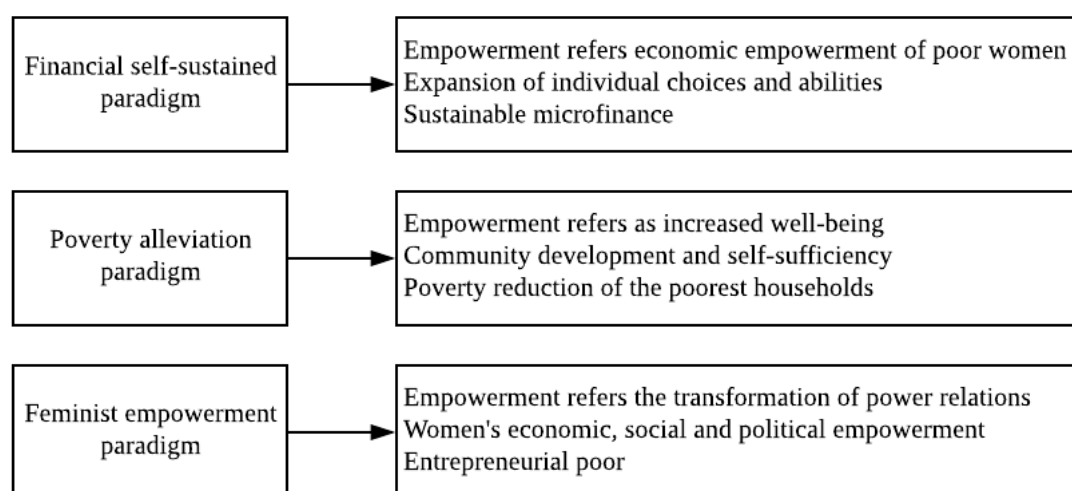
As a definition, this study suggests that empowerment is a multi-dimensional process that triggers ‘power to’ on all aspects both in their households and community for the protection against ‘power over’.

3.5 Women empowerment paradigms and theories

It is mentioned in the earlier chapter that empowerment is understood from different disciplines and paradigms. The explanation varies from one paradigm to another. Mayoux (2000) suggests three paradigms of women empowerment.

Firstly, *Financial self-sustained paradigm*- its main objective is to include the micro and small entrepreneurs along with other poor people through the provision of self-sustainable microfinance services. Aim in this paradigm is to deliver costs by using groups, capture economies of scale by expanding programmes, setting interest rate ‘right’ to cover the administration costs.

Figure 3. 3 Microfinance and paradigms



Source: Mayoux (2000)

Secondly, *poverty alleviation paradigm* incorporates the goals of the reduction of poverty, increased welfare and development of the community. Under this paradigm, women are provided a small amount of loan and access to savings both for income-generating activities and smoothing consumption. It justifies the use of subsidies as it focuses on the poorest of the society. Mayoux mentioned that higher level of poverty is the reason for targeting women. Here, strengthening women's status and poverty reduction are considered as the opposite sides of a similar coin. The assumption of increased access to financial and non-financial services of MFIs will help to ensure greater change in the context of gender equality. The underlying assumption of this paradigm is poverty alleviation and empower women in the households as well as in the community development are synergistic.

Thirdly, *feminist empowerment paradigm* is concerned about the gender equality and human rights. Empowerment of women is referred as the transformations of the power relations across the society. The basic assumption of this paradigm is that women's empowerment requires fundamental change to confront gender subordination in the micro level with the change in the development agenda at national level.

Mayoux (2000) also identified three empowerment categories related to the three paradigms. Firstly, *economic empowerment* refers that access to credit and savings provides women a greater economic role to make decisions about the use of the savings and credit. Women will enhance welfare for themselves and households by using the given resources. Besides, women also can be self-employed through the investment on the income-generating activities.

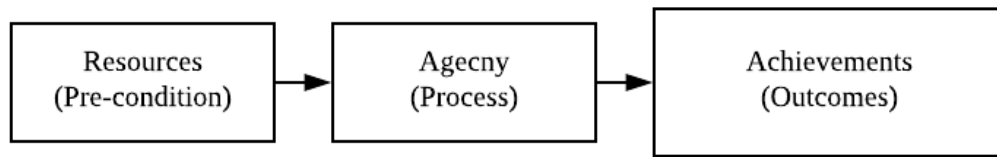
Secondly, *increased well-being* is another empowerment perspective refers to the access to the savings and credit facilities and how the savings and credit have been used which strengthen women's say in terms of making economic decision within the household. Mayoux (2000) mentioned that it facilitates the well-being of women along with the children through the increase of expenditure. Also, she underlined that women's control over the credit also benefits

men through obstructions in spending household income on unproductive and harmful activities.

Thirdly, *social and political empowerment* is the combination of control over income and women's increased economic activities that result from the access to the microfinance services with improved skills, increased mobility, gained knowledge and contacts. Besides, the household, status within the community is also enhanced because of increased financial activities.

There are other frameworks proposed by researchers and professionals for measuring the empowerment level of women. For example, Kabeer (1999) proposed a framework for the measurement of empowerment. As power is the root to be empowered, firstly, she signifies the power as the ability to determine choices. She stated that the idea of empowerment emanated from the existence of disempowerment at the first place. Therefore, empowerment is the process where disempowered are found to have that capacity to determine their choices what they have been denied earlier. In other words, empowerment involves *process of change*. People who exercise a great deal of choice may be very powerful, but they are not *empowered*, as they were never disempowered at the first place. However, not all choices are similarly pertinent to the meaning of power. Therefore, it must be qualified in various ways to be the part of empowerment initially. Choice is something where people can go for alternatives. Kabeer distinguished two types of choices depending on their outcome and relevance to people's lives. She referred the first type of choice as 'strategic life choices' such as the choice of livelihood, who to marry and when to take children which are more critical than second type choices. Strategic life choices outline the second type choices which might be required to the standard of one's life that are not relevant to the idea of empowerment. As indicated by Kabeer (1999), the concept of empowerment only incorporates the first type choices which are denied to them previously.

Figure 3. 4 Women empowerment framework



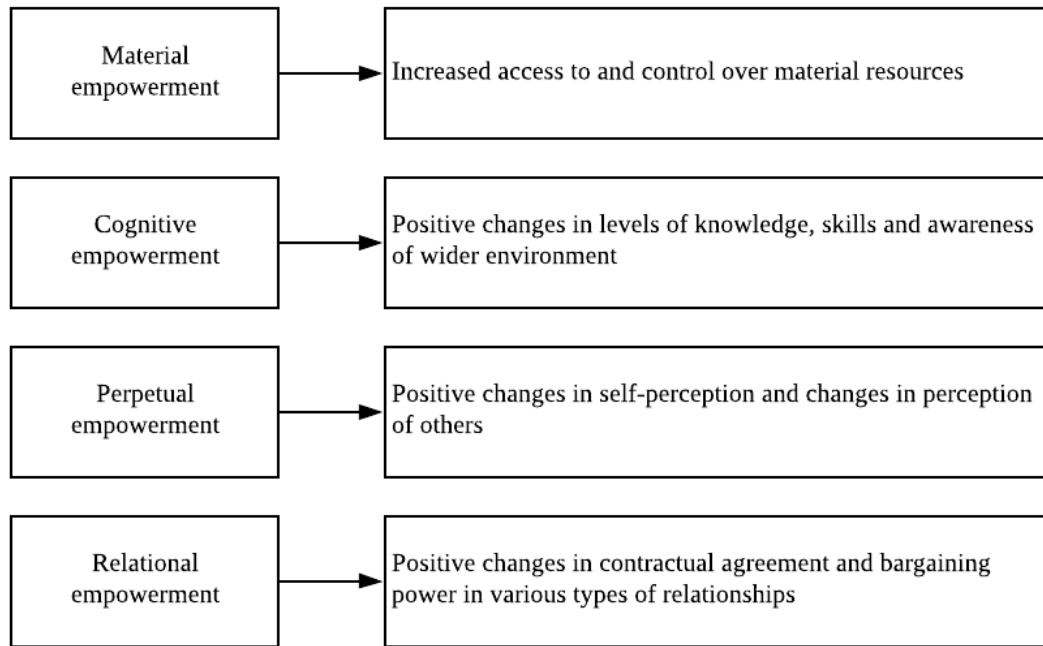
Source: Kabeer (1999).

In her framework of empowerment, Kabeer identified three elements *Resources*, *Agency* and *Achievements* to bring the change on the capacity to exercise choices. Access to resources is pre-conditions of empowerment (material, human and social) by which choices come to disempowered. Agency is at the centre of the process by which choices are made. It provides the capacity to achieve one's goals. Lastly, the achievements come through the combination of resources and agency. Achievements are the consequences of power of determining choices. The achievements from resources and agency are the expanded welfare of women which also incorporate the welfare of family members. Likewise, it encompasses the improvements in welfare compared to men reflected in diminished men inclination in welfare outcomes, for example, literacy, health, consumption, mobility, and others. The long-haul accomplishment is that the decreased subordination to men because of the change of economic, social and political environment.

Chen and Mahmud (1995) also proposed a conceptual framework of empowerment to observe the impact of microfinance services, specifically for BRAC based on pathways through which women experience change. They have distinguished four dimensions of empowerment namely, *material*, *cognitive*, *perceptual* and *relational*. Material empowerment happens through material change includes increased income and assets, change in the basic needs and increased earning capacities. Cognitive empowerment occurs through the changes in the levels of women's knowledge, skills and cognizance. Perpetual empowerment is how women are perceived by others which is indicated by increased social status along with self-esteem and

self-confidence. Lastly, relational empowerment takes place through the change in decision-making roles, bargaining position and participation in the community activities.

Figure 3. 5 Women empowerment framework



Source: Chen and Mahmud (1995).

Kabeer emphasised that empowerment is a process of internal change while Chen and Mahmud mentioned that external changes are also important for empowerment. External changes happen through the perpetual and relational empowerment.

The framework of Malhotra et al., (2002) first recognised the multidimensional nature of empowerment. They mentioned that empowerment happens on economic, socio-cultural, familial, legal, political and psychological dimensions. In this framework, firstly, economic empowerment refers women's authority over their income and other assets, supporting family through financial contribution and increased access to resources. Secondly, socio-cultural empowerment is indicated by the freedom of movement, commitment to educating daughters and lack of discrimination against them. Thirdly, familial empowerment incorporates say in decision-making, say over sexual relations and use of contraception, decide who and when to

marry and freedom from domestic violence. Fourthly, legal empowerment includes cognizance of legislative rights and apply the rights when necessary. Moreover, empowerment in political dimension includes learning of political frameworks and methods to get access to it. Also, support from households in engaging political activities and holds the democratic rights for casting votes. Lastly, empowerment in the psychological dimension incorporates confidence, self-adequacy and mental well-being.

3.6 Determinants of empowerment in economic, social and political dimensions

Various methodological issues must be considered with regards to estimating women's empowerment effect. Operationalising empowerment is the very first issue before jumping to the estimation. As, empowerment is not limited to one dimension, the indicators of empowerment must be chosen and converted into a quantifiable variable that can be tested (Weber & Ahmad, 2014). Estimation of empowerment remains vague and debatable over and how it will be best attained. At the beginning, endeavours to conceptualise empowerment were put in place to identify it as a socio-political process, including shifts in political, social and financial power between and around both individuals and social groups (Batliwala, 2007) while women's activists and other scholars of development field state that 'empowerment' takes a shape of another development buzzword maybe widely used in the literature, abused, and dug out of basic political significance (Batliwala, 2007; Parpart et al., 2002; Rowlands, 1998). The measures are different for various dimensions. For instance, personal empowerment is measured by girl's school enrolments; economic empowerment is measured by the micro-enterprise development services; political empowerment is measured by women's participation in Government (Goldman & Little, 2015). Malhotra et al., (2002) mentioned that studies focused on empowerment is often measured on only one dimension (for example, economic) where it is multidimensional that follows multidimensional pathways over different scales including individual, households and community (Mahmud et al., 2012). Along these lines, it

is important to measure the associations including all scales between various pathways for deciding the effects that an individual have and the possibilities of transformational change in the community.

This research investigates the term ‘empowerment’ across different pathways following Malhotra et al., (2002). Empowerment variables are profoundly rational and indicators used in one specific culture might not be appropriate for another. Economic empowerment is the most common dimension explored by the researchers in the field of microfinance as it seems to be the principle objective of MFIs. Economic empowerment signifies a process by which a woman’s life changes from one in which she was restricted with limited economic resources and agency (Taylor & Perezniето, 2014; Kabeer, 2008). There are three conditions identified by Yount et al., (2018) for economic empowerment of women such as *human resources*, women’s *access to and control over finances* and *social resources*. Human resources include acquisition of education, knowledge and personal capabilities, self-esteem and self-confidence to transform life (Taylor & Perezniето, 2014; Kabeer, 1998). Second condition is mentioned such as income and market work as well as ownership of financial and physical assets (Taylor & Perezniето, 2014; Kabeer, 2008). Third condition includes her ability to engage with non-family members to increase her economic activities and rights (Kabeer, 2011). Accordingly, researchers measure the empowerment from different perspectives as it has multiple conditions to meet. For example, to measure women’s empowerment, Garikipati et al., (2017) used women’s role in *financial decision*. It was widely used by other researchers too (Ganle et al., 2015; Goldman & Little, 2015; Mahmud et al., 2012; Garikipati, 2008; Holovet, 2005; Kabeer, 2001; Hashemi et al., 1996). Also, *control over resources* was used extensively in the literature (Weber & Ahmad, 2014; Mahmud et al., 2012; Garikipati, 2008; Pitt et al., 2006, Goetz & Gupta, 1996) where resources include income, savings and assets. Moreover, *Loan utilisation* (Ganle et al., 2015; Weber & Ahmad, 2014; Holovet, 2005; Goetz & Gupta, 1996) and *Loan*

decision (Weber & Ahmad, 2014) were also deployed to assess economic empowerment. Furthermore, *buying and selling of property* (Swain & Wallentin, 2017; Weber & Ahmad, 2014) and *ownership of household assets* were used to measure the economic empowerment (Garikipati, 2008).

Social empowerment of women is a broad area of practice typically implemented at four levels such as individual, family, community and social policy level. Women's social empowerment refers to that process where own sovereignty and self-confidence grow as well as women achieve the ability to influence the social relations both individually and communally. Empowerment is observed in three different categories such as household, community and broader arenas in the framework of Malhotra and Schuler (2005). According to their viewpoint, women's mobility indicates empowerment in household level where in community level is indicated by women's visibility in access to social spaces, presence in social or religious festivals and networks in the community. Lastly, women's education level and their roles and contributions refer empowerment in broader arenas. Mahmud et al., (2012) used mobility of women to measure social empowerment, similarly, mobility was used as an indicator in other studies too (Weber & Ahmad, 2014; Schuler et al., 2010; Hashemi et al., 1996). *Family planning decision* (Swain & Wallentin, 2017); *decision on children's marriage* (Swain & Walentin, 2017; Weber & Ahmad, 2014); *decision on children's education* (Swain & Walentin, 2017; Weber & Ahmad, 2014; Garikipati, 2008) are also widely used indicators to measure empowerment in household level.

There are few studies conducted in terms of political empowerment. Hashemi et al., (1996) used *political/legal awareness and political activity* as an indicator to measure political empowerment. Political participation such as women speak at governance meeting and stand to speak at governance meeting used in a study in Tanzania by Goldman and Little (2015);

attendance in village meetings by Deininger and Liu (2013) and casting vote, campaign in the election, interaction and consultation with local elected representatives by Kabeer et al., (2012).

3.7 Microfinance, women and development

3.7.1 Why microfinance focus on women?

Despite the fact that South Asia has seen admirable accomplishments in this spectrum of development, its performance on gender issues and women's empowerment is mediocre. As a part of the sub-continent, it remains constantly true for Bangladesh, where the gender discrimination is still particularly common and hinders social development. It resembles applauding with one hand when growth is expected without the participation of women in the economic activities. The equal enthusiasm and participation of both women and men are of the paramount importance for a convincing and sustainable economic growth of the nation. Women's participation and cooperation are crucial to the social development, which is an integral part of sustainable development. In addition, UN Women (2014) appropriately outlined that gender equality is compulsive to make a reasonable and supportable world and to enhance the contribution of women to both households and communities. Despite the emphasise from various development bodies, there is still a noticeable gap in the greater part of the improvement index, for example, in education, health and human rights. Gender inequality makes and keeps women poor while women are denied basic rights and opportunities for well-being including having bank accounts, education, wages, protection from violence as well as access to credit and resources. In terms of education, the adult literacy rate has risen to 85% from 76% in 1990, but still 60% of world's illiterate are women. Regarding wage and leadership, stark gender disparities remain in economic and political realms where women earn 24% less than men globally. Also, only 50% of world's working age (15 or over) women are in the labour force compared to 75% men. With regards to politics, only 22% of all national parliamentarians are reported women in 2015 a slow rise from 11.5% in 1995. Moreover,

violence against women is widespread across the world where 35% of women experience sexual and physical brutality by their intimate partner or non-partner. (UN Women, 2015).

The removal of poverty can only be possible with the end of gender-based discrimination, in other words, with the strong economic and social status of women. Women have not always been the centre in the history of banking services which deal with the poor. Nevertheless, the scenario began to change with the inception of modern MFIs since 1970s. Modern microfinance started to incorporate women into financial systems, for illustration, percentage of women clients of GB was 95% in 2001 from 44% in 1983 (Armendariz & Morduch, 2005). What is the explanation behind this abrupt enthusiasm? Microfinance practitioners and donors have argued that gender equality, poverty reduction and MFI efficiency are behind targeting women. Women are more committed to repay the loan than men which increase MFI's efficiency. With respect to gender equality, microfinance is assumed frequently as an effective instrument to enable women to start their income-generating ventures, thus increase their income, savings, control over resources and increase intra-household bargaining power. In terms of poverty reduction, women are assumed to be more effective to uplift their economic position as they are more likely to invest the loan for family well-being to a large extent. Pitt and Khandker (1998) mentioned that women are more likely to spend for the children's welfare. Culturally, women in Bangladesh are more savings oriented than men where they save for an emergency such as medical and natural disasters. On the other hand, lesser default of loan is reported by some studies as one of the significant reasons for targeting women predominantly. Studies found a relationship between women clients and higher repayment. For instance, D'espallier et al., (2011), using data from 350 MFIs in 70 countries reported that lower portfolio risk, fewer write-offs, and fewer provisions are the reasons for higher concentration of women in MFIs. This is also echoed by the study of D'espallier et al., (2013). Using extensive data of 398 MFIs of 73 countries, they reported that repayment rate is

significantly enhanced by women clients. They further reported the increased operational cost including staff and administrative when MFIs focus on women, however, additional cost is not related to gender, rather related to nature of loans. In their study, they mentioned women's higher repayment rate remains statistically significant even after control with nature of loans.

Keeping the repayment aspect aside, other reasons are found in different studies such as women-run enterprises out-survived the men-run enterprises (Kalnins & Williams, 2014); women are more reliable compared to men with respect to less-risky investment and moral hazard (Kevane & Wydick, 2001). Armendariz & Morduch (2010) related the repayment attributes of women with cultural, social and legal restrictions. They asserted that women are better clients because of limited credit sources in light of these restrictions. Women respect the required procedures more than men to retain their accessibility.

On the other hand, microfinance is found more impactful when the services are provided to women. For instance, collecting data of 1798 households in Bangladesh using multipurpose quasi-experimental household survey in 87 villages of 29 thanas (sub-districts), Pitt and Khandker (1998) asserted that credit provided to women significantly impacted all of the six behaviours checked in the study such as girls' schooling, boy's schooling, women's labour supply, men's labour supply, per capita total expenditure and women's non-land assets. Their study reported that housing consumption increased by 18 Bangladeshi Taka (BDT) when additional 100 (BDT) borrowed by women while it was 11 (BDT) when men borrowed the loan. It suggests that women are capable to earn more relatively when they get access to finances. Similarly, with the same data, Pitt et al., (2003) examined the effect of group-based participation of credit programmes where they compared women to men on child health outcomes when given loans by four MFIs in Bangladesh. Most of the women samples of their study did not have prior contact with any credit market before joining MFIs. Their study reported that women's credit has a large and statistically significant impact on two of three

measures of healthiness of both boy and girl children while credit given to men had no statistically significant impact. Their study also reported that 10% surge in women's loan increase their daughter's arm circumference by 6.3% which is twice when similar proportion rise in credit for men. Credit given to women have positive and statistically significant on the height-for-age of boys and girls too. Their study concludes that MFIs have significant impact on family well-being when women are the participants. Hazarika and Guha-Khasnobis (2008) also reported children's long-term nutrition where they mentioned women's access to microcredit are positively correlated. Drawing data from 1995 Malawi financial markets and food security survey which contain the data of 404 households in 45 villages of five Malawi districts, their study suggests that women's relative control over the household resources or intra household bargaining power measured by access to finance plays a role towards '0-6 years old girl children's food security, but not for the boys. They have inferred that men's access to credit has no effect either for boys' or girls' nutritional status. More recent study of Swamy (2014) reported a strong impact in terms of change in income of the poor particularly for those households headed by women. Using data of 1052 respondents collected by stratified random sampling from eastern, western, northern, southern, north-eastern and central regions of India, Swamy (2014) summarised that income growth (compound annual growth rate) net of inflation effect was more than double for women. This research used comparison groups includes scheduled castes/scheduled tribes, other backward class categories and general categories. Their findings informed that women in general categories are hugely impacted by their awareness levels and access to tools of economic progress. They emphasised that women use provided credit in an effective way which helps to improve household well-being and, also increase their savings, thus increase women's intra-household bargaining power.

Menon and Rodgers (2011) also reported positive impact of women's access to credit in rural India. Deploying the number of bank branches as a proxy of access to credit using 17 years of

data (1983-2000) from Indian national survey, their study shows that access to credit more likely to have significant impact on women's self-employment as own-account workers and employers while it discourages men's self-employment as unpaid family workers. Explanation behind the surge in women's self-employment is that the availability of financial resources in rural areas where they are able to start home-based enterprise, as men go after other occupations, thus women reduce their vulnerability and improve social security. They have stated that land-ownership is conducive with respect to increase in self-employment as land can be used as collateral, nevertheless, it is applicable for both women and men. Their study indicates that with the increase of financial resources, employment shifts away from unpaid or low-wage work toward more productive and profitable self-employment activities.

Prioritising women as the clients of MFIs have been driven largely by the gender equality as women are still due to equally participate in many aspects. Moreover, identifying women's deprivation in many areas, understanding the necessity of women's contribution in the society, summon from UN's to empower women, several agencies and organisation, for instance, MFIs have taken initiatives for women. Besides, higher integrity regarding the repayment of loan has been considered later to target more women which helps to maintain the financial performance of MFIs. Evidence of impact studies on women in terms of their economic improvement and family-wellbeing may inspire MFIs and donors to incline to women.

3.7.2 Microfinance and social development programmes

Microfinance is mostly known for its financial products, nevertheless, since most of the clients of MFIs are from rural areas, they lack knowledge and skills to conduct productive activities with financial services, MFIs have been providing non-financial services on the ground of clients' unskilfulness and inexperience to function the activities of microenterprises (POWG, 2006). According to Parker and Pearce (2002), non-financial services of MFIs range from

‘social intermediation’ to form social capital and basic skills for the clients and ‘business development services’ for entrepreneurs. According to CDF, 74.31% of MFIs were found to provide multiple social services in Bangladesh including education, health, prevention of child marriage, water and sanitation, environment and disaster management, good governance and legal support and family planning. 53.53% of MFIs have provided training to their both members and non-members including training on cultivation, fish culture, animal husbandry and poultry, nursery, sewing and tailoring and others. MFIs usually receive training from CDF and Institute of Microfinance (INM) and then provide training to their members (CDF, 2017). Other services of MFIs include consultancy, provision of market information, databases, intermediation with buyers and markets and building business networks (Parker & Pearce, 2002; Ledgerwood, 1999). BRAC, for example, provides training on income-generating activities such as poultry rearing and teach technical skills (POWG, 2006). During 1985, BRAC became the partner of UN’s food programme for vulnerable people. It has realised that though food programme initially provides a ‘breathing space’ for the poorest, however doubted its ability to eradicate extreme poverty following the 1974 famine in Bangladesh. Therefore, BRAC and UN started pilot testing with 750 women to combine the food programme with skills training programme to make them competent so that they can increase their household income. Women were provided poultry and vegetable production trainings for two years. According to a BRAC study, these women have increased their income significantly and 80% of them were eligible to get access to microcredit and social development services of BRAC (Matin & Hulme, 2003). Nonetheless, majority (56.08%) of MFIs provided educational services in 2017 that demonstrate the focus of MFIs on the member’s human capital. Education is the bridge through which people assemble knowledge and skills that lead to employment, business, innovation or other productive activities. Education rate indicates economic and social productivity of a country where men and women are both equally crucial. For instance,

using a sample of 22,197 women of Indonesia through a longitudinal study, Samarakoon and Parinduri (2015) have reported that increase in women's education were more likely to increase women's contraceptive use, promotes reproductive health practices and reduce the birth of children. They have deployed high school education (the years of schooling and completing senior high school) to measure women's empowerment. They have measured empowerment through women's fertility, decision-making power, ownership of assets and participation in the community. Their findings show that one additional year in the school increase the likelihood to use contraception, breastfeeding children and receiving tetanus injection. Completing senior high school is appeared more impactful as it reduces the number of live birth and also increase the contraception use, breastfeeding children and receiving tetanus injection by bigger margin. Increase in contraceptive use decreases the birth rate of a country what is exceptionally vital for densely inhabited countries, at the same time, per capita income increase triggered by the reduction of the population of the country. Nevertheless, their study found no evidence of education in impacting women's decision-making except in savings, women's asset ownership apart from household appliances and jewellery and participating in the community except visiting the community centre that provides pre and post-natal healthcare for women and infants.

Microfinance programmes in Africa, Asia and Latin America are found to provide credit with education what is a combined product of loans and education with information about "health, nutrition, business and money management" that is provided during their meeting (Freedom from hunger, 2011). Impact studies conducted by McNelly and Dunford (1999) in Bolivia reported positive impact of credit with education programme. They have collected data with mother-child pairs in baseline 1994/95 and follow-up in 1997 and used a quasi-experimental design. Participants were divided in three groups- credit programme participants at least for one year, non-participants in programme communities and residents in control communities

who did not receive service for the study period. Their study reports that majority participants of 1997 increased their income since they have engaged with credit with education programme. The participants explained this surge to the expansion of their businesses, reduced cost because of purchasing products in bulk. Another reason was that they paid with cash instead credit. They have also increased their personal savings. Majority of 1997 participants increased their domestic animals since joining the programme. Participants of 1997 were more likely to spend more in medical purposes and clothing, nevertheless, there was no evidence of significant difference in housing, food and education. Their findings also show the improvement in following health and nutrition practices by mothers who were present in centre meeting. In terms of intra-household decision making power, there was positive and significant difference found with respect to have a say on expenditure in house repair and family planning, nonetheless, there was no significant difference in children's schooling, clothing, medical and agricultural expenditure. A study by Karlan and Valdivia (2009) using randomised controlled trial, found that credit with business training improved business knowledge of women entrepreneur and it has been also found that client retention rate surged for MFIs in Peru. They have used three sample groups- mandatory treatment group who had to join weekly training in the centre and receive business education, voluntary treatment group who were not required to stay in the centre to receive business education and control group who received only financial services. Business education includes two modules where the first module is designed to teach what a business is, its location and how it should be operated. Second module concentrates on the calculation of production and operating costs and how to fix the price for the products. Results of the study represent that there was an increase in business revenue though it was small, however no evidence of relationship was reported. For instance, there was no relationship either with business revenue, or employment. Surprisingly, there was no impact on women's empowerment too. No impact on empowerment was explained by the selection of

already empowered enough for the business training not to have an impact on those indicators which were analysed in this study.

Microfinance is reported to have positive impact in terms of contraceptive use which prevents to have more children and HIV. Study of microfinance participation in Bangladesh and contraceptive decision-making by Murshid and Ely (2016) asserts that microfinance participation more likely to impact decision-making power of women in terms of contraceptive use. Fetching the data of 7325 women from Bangladesh Demographic and Health Survey, their study also mentioned that women engaged with microfinance programmes found to have higher family decision-making power compared to their husbands, however, it is for those women who are over 45 years old. Surprisingly, women are found to have lower-decision-making power when they had more education and wealth. They shed the light by mentioning that educated and wealthy women may like to discuss with their husbands prior to take decisions regarding family issues. On the other hand, Duvendack and Palmer-Jones (2017) report that women empowerment through microfinance and fertility reduction are fraught with problems and far from robust. They suggest reconsideration of the causal links between microfinance and fertility reduction through women's empowerment.

In summary, Samarakoon and Parinduri (2015) mentioned that education more likely to impact women's family planning issues but not in intra-household decision-making. Their finding was supported by MkNelly and Dunford (1999), nevertheless, they have also found positive impact on women's economic condition and empowerment. Karlan and Valdivia (2009) mentioned positive impact on business knowledge of women entrepreneurs but not in business sales, profit and employment and household decision-making. Murshid and Ely (2016) said women clients of MFIs with HIV literacy more likely to have agency in-terms of decision-making in contraceptive use, however, educated women are more likely to have lower decision-making power. Above studies represent the benefit of non-financial or combined services of MFIs in

household and business outcomes to some extent, nevertheless, the impact of these services yet not recognised for intra-household decision making power of women and empowerment in different dimensions, most possibly because of their elementary focus as intensification of these services would increase the operation cost of MFIs.

3.7.3 Microfinance and political development

Besides the economic and social dimensions, MFIs are reported to have an impact on political aspects as well. Political empowerment includes clients' political participation and awareness. Participation such as casting the vote in local elections, campaigning for candidates, become a political candidate, engagement in the local organisation, protesting collectively and so on. Political awareness includes knowing the name of local and national political representatives, accompany others in local administration office, awareness on available services to the citizens and so on. Connection between microfinance and political empowerment is not straightforward like economic empowerment. For instance, when financial services of MFIs improve the economic and social conditions of women, it is expected to see an increase in women's political empowerment because of a boost to their confidence, what Bayulgen (2008) terms as 'self-efficacy'. Microfinance has the evidence to improve clients' economic and social conditions, thus, enhances the sense of self-esteem and self-realisation. Along with self-efficacy, microcredit can form the social capital in the community which provides the opportunity to penetrate to political information and thus form the capacity of women to engage in politics. Social capital forms through the function of group-lending method of microfinance which was first introduced by GB in Bangladesh. Group-lending method was designed to use peer selection, peer monitoring, peer enforcement and peer support where all these build trust among borrowers. Putnam (1993) defines the social capital as the features of social organisation, such as trusts and norms can improve the efficiency of society by facilitating coordinating actions. In the context of microfinance, social capital forms through the collaboration during their

microfinance participation which creates social trust. Gradual interaction among the members make them feel that they are a part of a larger community. Thus, their group act as a support system for members in need. Social capital created by MFIs links individuals, enterprises and households through two channels-information and reputation (Mayoux, 1999). Passing the information from one to other creates a common belief in the community on which individual and institutional reputations are based in. Reputation works as the premise of further collaboration (Sebstad et al., 1995). However, is social capital created by MFIs related to political empowerment? Regarding this, Yunus (2003) contended that the trust and social connection made by microfinance have become vehicles for political activities as members from the same group have progressively economic and social ties. He has shared the experience of 1991 national election in Bangladesh. He informed that ‘the members of many centres paraded to the voting booths with banners reminding everyone that they were from a Grameen Bank centre and were voting as a block. In some cases, local politicians asked if they could address Grameen centre meetings...In 1992, some four hundred Grameen borrowers were elected to union councils, and in 1996, Grameen borrowers led the way to an almost unthinkable feat- more women voted in the national election than men, which helped to nearly wipe a political party that had taken positions against women’s rights out of parliament. In addition, over 1,750 Grameen members (1,485 women and 268 male) and 1,570 members of Grameen borrowers’ families were elected to local offices in 1997. Two Grameen male borrowers and fifty-seven male family members were voted in as chiefs of local bodies. These successful candidates constituted six percent of the total elected representatives in all the local bodies in the country. These astonishing results proved to us that once Grameen borrowers grew in self-esteem and they would readily express their opinions’ (Yunus, 2003).

Not only in GB, women clients of BRAC were also found to participate in politics. For instance, around 1600 women village group members of BRAC participated in Union council elections

where 580 women won (BRAC, 2016). However, there is a school of researchers who are sceptical in terms of the positivity of the microfinance in creating social capital. For instance, Kabeer (1998) contended that credit is given to those who tend to invest this on entrepreneurial activities with a vision of making profit, therefore, everyone competes each other where they may not like to be in a group, thus co-operation within the group seems not so smooth. It may create personal conflict rather than maintain the unity within the community in the long term. On the other hand, Rankin (2002) mentioned that relatively better-off group members were found to expel poorer members when there is economic stress as they may not repay the loans because defaulting the loan by any member potentially obstructs all group members to receive the next loan (Rankin, 2002). Moreover, monitoring each other's repayment behaviour can generate frenzy environment and sparks hostility as it is quite informal method of collateral and, most importantly, not regulated. Besides, Karl (2000) contended that economic inequality and democratic instability are directly connected. He further argued that it is impossible to sustain the achievements if income inequality exists in democratising countries. In the context of microfinance, there is a possibility of formation of social capital, if economic development occurs because of microfinance access (Impact on political dimension will be discussed further in section 3.11).

3.7.4 Microfinance and the macro-economy

Besides the micro impact of microfinance, it also has its macro impact, however the macro impact of microfinance studied less often by the researchers (Raihan et al., 2017; Imai et al., 2012). Imai et al., (2012) mentioned the scarcity of macro level data of microfinance is the reason for fewer studies comparatively. The impact can be observed from the microfinance industry itself. For instance, the employment generated (only staff of the MFIs) directly by MFIs in Bangladesh is 239,689 which is 0.40% of national labour force. The loan disbursement accounts for 17.62% of all the bank disbursement and savings represents 3.87%. Savings seems

to be lower comparatively due to small savings nature of clients. Nevertheless, the microcredit provided by MFIs is responsible for 49.61% of agricultural GDP (CDF, 2017). Some empirical studies investigated the macro impact of microfinance. Using data of 2382 MFIs for the period of 1995-2012 from 119 countries of six regions (East Asia and the Pacific, Eastern Europe and Central Asia, Latin America and the Caribbean, the Middle East, North Africa and South Asia), study of Lopatta and Tchikov (2016) reports that microfinance directly influence economic growth by increasing clients' ability in terms of purchasing power. They also asserted that microfinance indirectly impact the economic growth, capital accumulation and employment. Deploying a Computable General Equilibrium (CGE) model, Raihan et al., (2017) similarly suggest that microfinance has included somewhere close to 8.9% and 11.9% to GDP in Bangladesh. It additionally reports the rural GDP is much higher compared to the national level, somewhere in between 12.6% and 16.6%. Imai et al., (2012) also reported the positive impact of microfinance on the economy. Using cross-country and panel data of 61 countries, their study advocates for microfinance as it is appeared to reduce the incidence of poverty along with its depth and severity. On the other hand, some researchers of microfinance remained exceedingly sceptical with respect to the developmental impact (*e.g.* Lopatta et al., 2017; Bateman & Chang, 2012). With respect to the development, Bateman and Chang (2012) asserted that though microfinance conveys short term relief to poor people, it may turn out to be a hindrance on long haul sustainable development. In their study of sustainable development and microfinance, Lopatta et al., (2017), using a large transnational panel data from 952 MFIs of six regions, stated that relationship between the outreach and profitability of MFIs and the development is negative. Their study indicates that percentage of women borrowers negatively influence MFI's development mission. According to them, mission drift of microfinance is responsible for this result. However, others denied the mission drift of microfinance (*e.g.* Caserta et al., 2018; Mersland & Strom, 2010). According to Mersland and Strom (2010),

mission drift happens when there is an increase takes place in the loan amount. When focus migrates from social achievement to commercial achievement through incorporating better-off clients rather than who needs the service desperately is known as mission drift. Using the observations of 379 MFIs in 74 countries, their study neither found an increase in the loan in the whole industry nor higher proportions of urban customers. The regression results of their study represent that increase in loan size happens because of increased profit and operational cost. Caserta et al., (2018) also asserted that poor clients are never crowded out by wealthier entrepreneurs in terms of not-for-profit MFI. Regarding the for-profit MFI, mission drift does not necessarily occur when there is a combination of individual and joint liability in terms of offering the loan to the borrowers.

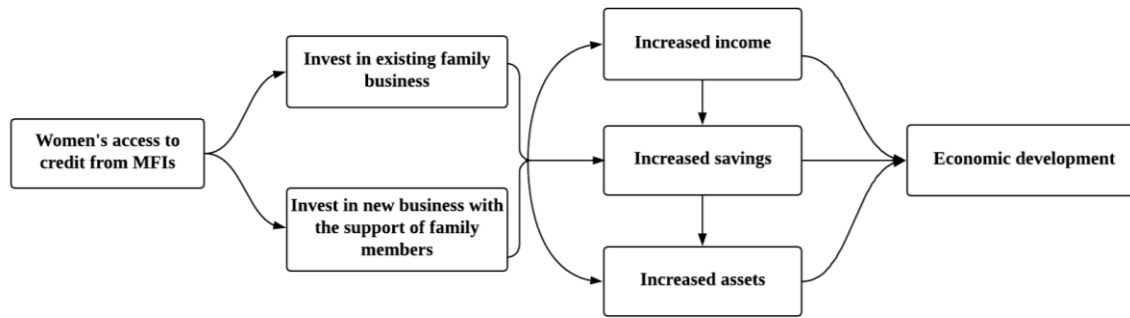
3.8 Financial products of MFIs

3.8.1 Microcredit

Microcredit-a small amount of loan what has been at the centre of the product line of MFIs since its inception. It is a small amount of loan designed for poor people, specifically women for engagement with income-generation through self-employment (Elahi & Danopoulos, 2004). Karlan and Zinman (2011) referred microcredit as small loans ranging from 100-500 (US\$) given to microenterprises. Unlike the conventional financial systems, this loan does not require any physical collateral but the social collateral. For instance, ‘peer monitoring system’ in the GB is a form of ‘social collateral’- which is missing in the formal financial systems (Mia et al., 2017). Nevertheless, size of the loan has a great importance to the borrowers as they may borrow a certain amount of money to satisfy their certain needs. MFIs usually offer a small amount of loan at the beginning. They are likely to offer larger amount of loan if the client is found not defaulting the instalment. This strategy is referred as dynamic incentive strategy (Johnson & Rogaly, 1997; Hulme & Mosley, 1996). Socio-economic status and the area of the borrowers have been also important predictors of the size of the loan. For instance, loan size is

reported to have positive relationship with the borrowers from urban area (Pisani & Yoskowitz, 2005; Painter & McKnelly, 1999). Size of the loan is also decided based on the borrowers' financial condition (Godquin, 2002). However, sometimes relatively better-off clients borrow a small loan to ease their short-term cash flow problems. Christen et al., (2003) and Ledgerwood (1999) suggested that amount of loan should be determined by the borrower's cash flow, characteristics and ability to repay. Loan size also differs based on the types of loan MFIs offer. For instance, GB offers *basic loan* to those who want to invest in income-generating activities. This loan is small but sufficient to start any micro business such as paddy husking, rickshaw purchasing, machine repairing, purchasing milk-cows, goats, poultry, clothing and pottery. In generally, this loan is provided to the clients with 20% interest for three years. There is another kind of loan called *micro-enterprise loan* which is available for members to purchase livestock, poultry, fisheries, agriculture, sericulture, manufacturing, forestry, trading, peddling and shop-keeping. The average size of this loan is 35,000 (BDT) (424 US\$ approximately), however, the highest size of micro-enterprise loan approved was 4 million (BDT) (48455 US\$ approximately) for poultry feed, aquaculture and fish trading (Grameen Bank, 2017). BRAC also offers collateral free loan called 'DABI' which means 'Right or Demand' to include women in the financial system. The amount of loan usually ranges from 12,000 to 212,300 (BDT) equivalent to 150 to 2500 (US\$ approximately) and can be repaid monthly within one year. Another loan BRAC provides is called *small enterprise loan* which is designed for small entrepreneurs to grow micro and small size businesses. Businesses such as poultry farms, fisheries, rickshaw mechanics, beauty parlours, and clothing shops are targeted by the small enterprise finance (BRAC, 2018).

Figure 3. 6 Development process through women's access to credit



Source: Agbola et al., (2017); Augsburg et al., (2015); Adjei et al., (2009).

3.8.2 Micro-savings

Micro-savings is a valuable mechanism for both women and MFIs. Women need to save for their personal or family causes. Also, they need to save for emergencies such as medical, smoothing consumption due to seasonality and unemployment (Johnson & Rogaly, 1997) as well as for investment opportunities (Rutherford, 2000). Micro-savings is small savings usually starts with approximately 1 US\$ and increase gradually with small deposits that (Mix market, 2016) deposited by those with low-income or who live in poverty (Hulme et al., 2015). Micro-savings is categorised into three types- informal, semi-formal and formal savings (Hulme et al., 2015). Informal savings mostly occur in the absence of other savings such as cash at home, buying jewellery, livestock or land. Semi-formal savings come from NGOs, MFIs and credit unions. Formal savings is provided by the formal financial institutions such as banks, cooperatives and insurance companies. People with low-income usually prefer informal savings in light of not having access to formal savings facilities. Vonderlack and Schreiner (2002) examined the savings habit of poor people in Uganda. They mentioned that people are found to hide their cash at home for future use or they lend others. Rutherford (2003) also mentioned home savings preference in an in-depth study of 42 rural and urban households in Bangladesh. However, informal savings are less likely to be secured and are unable to serve

large number of poor people. In the context of Bangladesh and microfinance, semi-informal savings tend to be relatively secured than informal savings. Women get access to more cash, interest and security from micro-savings and it has the capabilities to serve a large number of people at macro level (Karlan et al., 2014). It also can benefit MFIs in terms of their financial sustainability and cost efficiency (Churchill & Marr, 2017). For instance, MFIs in Bangladesh have become self-sufficient from grant and donor dependent through mobilising savings of clients.

MFIs offer a variety of savings such as compulsive and voluntary savings. Compulsive savings is referred as the amount of savings that the clients of microfinance are supposed to save as a pre-condition to be qualified for the future loan. Compulsive savings contain some beneficial attributes for both MFIs and their clients. For instance, MFIs can use savings facilities as a screening device to filter the borrowers through observing their repayment behaviours (Hulme & Mosley, 1996; Dowla & Alamgir, 2003). Moreover, it is considered as a stable source of funds for MFIs. Furthermore, it helps clients to be habituated with consistent savings (Rutherford, 2003). Specifically, it is secured source of finance for women in Bangladesh where finances usually controlled by male members of the households. Women can legitimise their savings instead of hiding at home through compulsive savings (Dowla & Alamgir, 2003).

On the other hand, an amount of money deposited in the savings account which is not compulsory is referred as voluntary savings. Poor households are more likely to save with voluntary savings facilities (Kabeer, 1998). GB offers three kinds of savings products to its clients such as personal savings account, special savings account and pension savings (Grameen Bank, 2016). Clients can save whatever they like to save in their personal savings account subject to weekly minimum payment that depends on the amount of the loan and they also can withdraw any amount subject to recent instalment. They are offered 8.5% as interest on this savings. Special savings account is not illiquid until its three years of maturation. The

amount can be withdrawn after three years contingent on a minimum balance of 2000 (BDT) (30 US\$ approximately). Women also receive the interest rate of 8.5% on this savings. With regards to GPS, a fixed amount, 50 (BDT) (less than 1 US\$ approximately) is mandatory to save for 5 or 10 years period. Also, clients must have minimum 8000 (BDT) (100 US\$ approximately) as a loan. 12% of interest is offered for ten-year term while it is 10% for five years term for this savings. BRAC also offers several savings products to its clients such as general savings, monthly profit scheme and DPS (BRAC, 2018). General investment accounts enable the clients to save any sum in a secured account which also produces interest. On the contrary, monthly profit scheme is another type of savings where clients deposit a fixed sum and get interest on a monthly basis. DPS is long-term savings where customers are provided high return when they deposit a fixed amount of money.

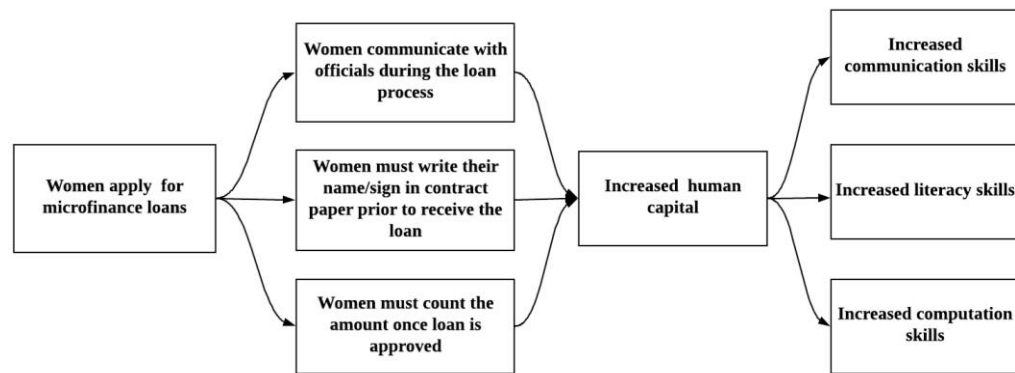
3.9 Microfinance: Beyond the financial products

Mahmud (2003) mentioned that access to resources are the pre-conditions for empowerment by following the route to empowerment. It suggests that if women are provided access to resources, they will have the opportunity to actively participate in the household process. Bangladeshi women are socially and financially reliant on men in light of patriarchy, sexually orientated and class-based nature of the society. It is very much perceived that social and economic limitations on their authority over resources is significant explanation behind their subordination and low status to their men counterpart. All things considered, it is assumed that by expanding access to financial and non-financial resources, women will be able to enhance their social and economic status. Women's access to and authority over human and social resources through wide connections in the different domains of household, market and community are critical in this case (Mahmud et al., 2012). Therefore, along with financial capital, women's human and social capital are also fundamental to be empowered. Though microfinance started its activities by providing a small amount of loan as business capital, it

has broadened its services over the years. It is no more restricted to small loan and has emphasised the construction of human abilities such as education, knowledge, skills and experience which are referred as human capital.

Human capital is one of the main drivers of economic growth. It gathers and extends opportunities by making somebody self-enabled and facilitates community and social participation through expanding knowledge, skills and abilities. Human capital spotlights on the autonomy of individuals through learning and skills other than their exertion in expanding their production possibilities (Sen, 1997). It tends to be divided in two forms, for example, general human capital comprises of socio-demographic attributes such as age and sex, and other one is specific human capital comprises of education, training, work and administrative experience (Estrin et al., 2016; Junquera, 2011; Madsen et al., 2003). For instance, education increases knowledge which can be translated to skills and thus, an educated person can generate more commodities. This adds value to the economy along with the income of that person. Moreover, that person can be benefitted in other ways from education such as building communication and argument ability, capacity to choose in an increasingly educated manner and having more esteem by others. This way, human capital is considered as potential indicator of economic development. Moreover, it exerts a fundamental influence on social and political factors (Barro, 2015; Becker, 1964) such as fertility, education of the children and democracy

Figure 3. 7 How human capital forms through access to microfinance programmes



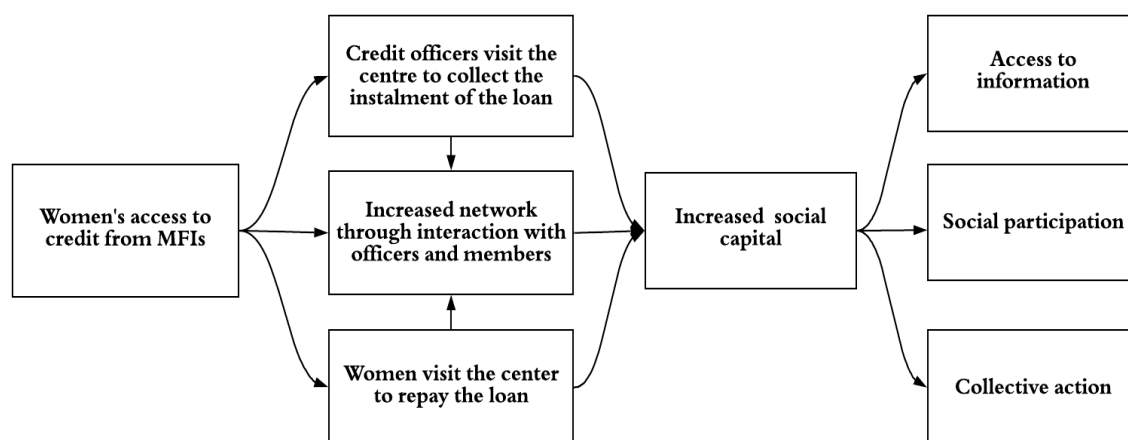
Source: Dowla (2006).

Historically, microfinance clients are characterised by low levels of human capital such as illiteracy, poor health, lack of skills and these all are linked to clients' marketability and competitiveness. In Bangladesh, people must write their name and sign prior to receive loan. Traditionally, poor people place fingerprints in an empty paper to borrow loan from informal money-lenders where there is a risk of being conned. In this regard, the clients of GB are required to learn to write their name rather than just placing the fingerprints to have access to the products and services. This decision of GB has worked as motivation for the clients. For example, Dowla (2006) mentioned that clients of GB have put an endeavour to learn how to write their name. Rahman (1999) mentioned that a fraction of clients changed their name as they were long and complex to write. He mentioned whether the names are given or organised, the informant's capacity to write their name is a source of pride and inspiration for the poor illiterate women in Bangladesh where they do not have to use their finger-prints and this provides a sense of confidence. Skills development is another significant aspect of human capital. People's skills and implicit knowledge are fundamental sources for the assets specific to micro-projects (Hashemi et al., 1997). Human capital also consists of skills development. With respect to developing skills, MFIs arrange annual meetings with the leaders of all the centres. In this meeting, they discuss the information on income-generating activities such as

poultry and livestock rearing, cow fattening and others. Centre leaders share this information with the members in the centre which enhance the knowledge of the members and they convert their knowledge to skills through the application (Dowla, 2006). Thus, microfinance incorporates human capital of clients as a non-financial service.

Another important non-financial service MFIs have been highlighting is the social capital of the clients. Social capital is the connection among people who live and work in a particular society. Unlike human capital, 'it's not what you know, it's who you know'. It is alluded by the associations, connections and altruism that exist between an individual and his/her networks and contacts which is joined with trust, correspondence, data and collaboration produced between the central individual and performing artists in the social gathering (Audretsch & Keilbach, 2004). Researchers recommend that interest in social capital is the key to viable business administration and conveys access to both human and financial assets (Pirolo & Presutti, 2010; Audretsch & Keilbach, 2004). In the context of microfinance, social capital is utilised as trust and connections among the group members which works as security against the received loan. This strategy reduces the administration costs for the MFIs, as members themselves come together in a centre where they meet on regular basis and pay instalment of their loan. Also, centre increases exchange among members where they have the opportunity to make connections with others who are better off comparatively on economic and social aspects (Larance, 1998). Her study suggests that weekly meetings in the centre have diminished clash among the people as they are known to each other. Business activities are also enhanced by their social contacts besides ensuring access to finances (Kabeer, 2001; Mayoux, 2000). In addition to its use as social insurance, it also makes a space in which new contacts can be made with an assortment of advantages with different favourable circumstances. Skills development training and other necessary initiatives may arise from the discussion in the meeting (Mayoux, 2006; Mahmud, 2003).

Figure 3. 8 Women's engagement with MFIs increase social capital



Source: Kumar et al., (2019); Goldman et al., 2015; Larance (1998).

Larance (1998) outlines how immediate family and kin groups utilised the meetings. In her research, weekly or monthly meetings gave the chance to grow their engagement in communities which enhanced all types of exchanges among the members. She referred a few instances of her respondents, for example, one respondent, who got the information of government's mass education programme helped her to get enrolled for this course and gradually she learnt how to read. Another respondent utilised the system to gather rice water with more nutrition for her cow that she purchased with a loan from the bank. The respondents notified that they additionally utilised the network for social interactions, for instance, members borrow garments and jewellerys from each other to wear in social events and utilise the system to confront social obstructions. Above all, their expanded network facilitated the mobility confinements for the members who were secluded and their collaboration was constrained to the members of the households. It also facilitated them to go outside the village. Increased network was particularly beneficial to married women, now they can utilise the network to look for help rather than visit their natal village. Increased network results increased self-confidence and mobility, thus women can make their way to politics whether as voters, campaigners or candidates. Moore and Putzel (1999) proposed that empowerment ought to include expansion

of political abilities of poor people who will choose whether they can utilise social capital valuably or make social capital where it is needed. They further contended that most imperative job for external agencies may not be specifically to backing the mobilisation of poor people, but to make a favourable environment for mobilisation. For instance, by discussing the political issues in their weekly meeting, GB has increased the political engagement of their members, motivated them to vote and go to the voting centre as a group.

Bonding, bridging and linking are three types of social capital (Dufhues et al., 2011). Bonding social capital signifies to a strong connection while bridging social capital refers to the weak connection (Woolcock & Narayan, 2000). Linking social capital is the connection with those who are in a position of authority. Sanders and Nee (1996) proposed three instruments of social capital that emphatically influence financial achievement. All in all, social capital can offer instrumental help, for example, free work or informal credit, mental help and important information. Bonding capital facilitates a person with those data that preserve interest even when the individual has not effectively hunt down these data (Lai & Wong, 2002). In such manner, Wellman and Wortley (1990) asserted that the general population increase the majority of their social and mental help through a small number but a strong tie. It might likewise benefit households to control hard circumstances and hence it might lessen the likelihood of defaulting loans. However, data or resources collected through strong ties are often limited to similar resources. Accordingly, the quality of bridging social capital lies in encouraging access to extra resources that are distinctive to the system of strong ties (Lin, 1981). Along these lines, households equipped with bridging social capital may improve the situation in business and may have better reimbursement rate, which ultimately makes them financially sustainable. Nevertheless, the outcome may not always same, for example, in view of a long-term ethnographic investigation of rural life in Bolivia, Maclean (2010) examined the intricacy and gendered relations inferred in how social capital is observed to help financial improvement. He

proposed that the way in which microfinance programmes use social capital to increase income does not generally reflect the way that women's networks encourage access to resources and eventually, financial improvement.

3.10 Literature review of microfinance and women's economic empowerment

MFIs initially began with microcredit; however, other services have been incorporated over the years including micro-savings, micro-insurance and money transfers which are attributed to help the clients to increase their income (Rooyen et al., 2012). From a systematic review of 15 studies on the impact of micro-credit and micro-savings in Sub-Saharan Africa, they suggest that the impact of microfinance is mixed while it does harm as well as good to the livelihoods considering the financial and non-financial outcomes. Thus, the literature of microfinance is multifarious with positive, mixed and negative impact in different countries. Heterogeneous outcomes may originate from individual or household characteristics of clients, lending methodologies such as group or individual lending model used by MFIs, services such as credit only, credit with training and literacy or other services provided by MFIs. Dutta and Banerjee (2018) conducted a study on microfinance and women's entrepreneurial initiatives in rural areas of 17 districts in Bangladesh. They have collected data from 1200 women from 15 MFIs (large, medium and small) in 2015 where treatment and control group had 600 women each. Descriptive findings of their study show that women with more than 15 years of membership with MFIs are found in better economic conditions (measured by per capita income and gold ownership) compared to control group. Treatment households are more engaged with any sort of income-generating activities. Around 84% of the borrowers got engaged in business where 66% are found to be running an existing business. Only 11% were start-up firms. They have argued that women engaged in petty enterprises without disrupting their household roles since they live in a strong male dominated household with lower human capital. They suffer from capability failure as intra-household bargaining power remains just on the papers as results

suggest that less than 10% of the respondents had control over loan as well as ownership and the operation of the business. Shockingly, only 16.38% were found to be consistent entrepreneurs while 24.14% of respondents used the loan for consumption purpose. Thus, they may have improved their family consumption expenditure. Nevertheless, 54.31% began self-employed work such as rearing livestock and agriculture in small land though they are considered traditional risk averse sectors. It may happen because of low human capital of women and strong patriarchal nature of households. Though, women from MFIs have far higher engagement with income-generating activities, but non-users are found to be more innovative in terms of business ideas and risk loving. This study has argued that lack of training from MFIs is responsible for this while it is found that only 28% received training which focus to develop human capital, among them, 30% did not apply the training in their business. Another significant finding of this study shows that per capita income is higher for those who had low frequency of repeated loans annually compared to those who had a greater number of loans. This finding is also corroborated by earlier findings which suggests that repeated and small amount of loans do not ensure high-income path (Field et al., 2013). Ergo, frequent access to small loans is not useful to the borrowers where they end up using the loan for consumption rather than investment. This study further pointed out that, microfinance is an example of poverty reduction through entrepreneurship, nevertheless, this entrepreneurship is not transformative, rather it promotes an environment of traditional risk averse investment. Consequently, they have condemned MFIs because of prioritising high repayment rates as well as their growth. They have concluded that credit programmes of MFIs failed to make 'big dreams' certainly, however, inclusion of appropriate training and capacity building programme would change the scenario. Another study also suggests surge in entrepreneurship. Using both group-lending and individual methodology with 1148 women in rural Mongolia, Attanasio et al., (2015) reported an increase in entrepreneurship along with food consumption after getting

access to credit where increase in entrepreneurship driven by less educated women, however, they did not find the evidence of profitable enterprise, other sources of household income and savings. They have collected data through a randomised field experiment from 40 villages across five provinces in rural Mongolia on two occasions, first survey conducted before the lending programmes from March 2008 to September 2009 and a follow-up survey after 19 months later in October 2009. 15 villages allocated to group-lending, other 15 went to individual-lending and 10 were control villages. Their findings show that half of the credit was spent on household consumption when it was provided through individual lending programme. Similarly, there was no impact through individual lending programme on poverty impacts. On the other hand, women are 10% more likely to invest the loan on entrepreneurship when credit was provided through group-lending programme. Thus, women entrepreneurship increased by 9% compared to control villages. Access to group-loans also impacted the food consumption such as milk, bread and non-alcoholic beverages where it was around 18.46 (US\$) higher per household in group-lending villages than control villages. They have explained the reason behind stronger and significant impact of group-lending on consumption and creation of enterprise mentioning that group-lending may be more effective to increase the income of the households. However, there was no evidence of higher income in both programmes compared to control villages. There were no differences found between the individual and group-loans in terms of repayment behaviour. They also suggested that group-lending model is more useful than individual-lending in terms of creating poverty impact as self-discipline may be accelerated by group borrowing what ensures the use of the loan for investment in productive activities rather than household consumption. In the conclusion, they have emphasised the importance of group-lending methods and warn against the move for individual-lending method by the MFIs. Another study conducted by Angelucci et al., (2015) shows the microcredit impact using 16,560 household surveys in Mexico. Using Compartomos Banco,

the largest micro-lender of Mexico which provides loans to women suggests that the treatment households have grown businesses due to access to credit where business revenues increased by 27% and expenses increased 36%, consequently, there were no corresponding effects on business profits. They have used cluster randomised trial which had extended group-lending loans to 238 clusters in North-central Sonora, a city of Mexico through the selected MFI where treatment clusters were given access to credit and loan promotion and nothing to control clusters. This study collected data using baseline and endline surveys from 2009-2012. Their findings also reported on household income include income from business, labour, remittances and charity. They have found no evidence of statistically significant impact on income sources, but the impact was found on government or other charity sources. Empirical finding shows that access to credit can reduce income from charity sources. They have mentioned that any surge in business income may have been balanced by the reductions in income from other sources. Nevertheless, their study reports modest growth in women's intra-household decision-making power as they found higher margin of women's participation in household decision-making in terms of finance.

On the other hand, some critics of microfinance continue to remain highly sceptical regarding the growth impact. One of the early studies in Bangladesh, Hulme and Mosley (1996) mentioned that poor households do not benefit from microfinance. Rogaly (1996) also reported similar results from systematic literature review. His study recommends that clients with higher income (above poverty line) benefitted from microfinance while households with lower income (below poverty line) ended up with less incremental income after receiving the microfinance services. This statement is supported by Stewart et al., (2012) through a systematic review of low and middle-income countries. They stated that microcredit and micro-savings contribute to reduce poverty for the poor, but not for the poorest; short term relief for the poor but a long-term obstruction for sustainable development. Concerns have been more intense since last

decade where ‘microfinance meltdowns’ are found in Morocco, Nicaragua, Pakistan, Bosnia, Mexico and Lebanon. The most gruesome report appeared in India where more than 200 poor indebted residents killed themselves because of the verbal abuse of MFIs officials due to non-repayment (Business insider, 2012). A recent study conducted in Bangladesh by Banerjee and Jackson (2017) reports that microfinance clients had a little success in escaping poverty. They have collected data using 73 interviews and seven focus groups from three villages in Matlab district of Bangladesh. All the samples which have been used in their study were considered ‘chronically and extreme poor’ on the premise of their consumption of one to two (US\$) per day. The respondents were reported to increase their indebtedness and loss of properties because of their inability to repay the loans. Researchers mentioned the reasons behind the unproductive behaviour of the loans, firstly, majority clients used the loans for daily consumption such as purchasing food, medicine and other necessities. Loans were also used for dowry payments, housing and children’s educational cost. However, 9% of the respondents used the loans for business activities where 35% used for agriculture, such as cash crop maize, nonetheless, it did not yield the results because of natural disasters such as frequent flood, moreover, no yield intensified by lack of training on high productive agriculture which make them worse than before pushing towards indebtedness rather increase their income. Furthermore, multiple borrowing behaviour of the clients introduce them to a vicious spiral of debt and trapped them without their consciousness which means it happens in front of their eyes, but they are not able to recognise it.

Some of the studies reported largely positive impact of microfinance. For instance, a recent study using 211 samples (105 clients, 106 non-clients) found positive impact of MFI called, Cantilan Bank, Inc (CBI), in Philippines suggests that clients’ households are appeared to have modest improvement in well-being, specifically in income and savings compared to non-clients households (Agbola et al., 2017). They have used quasi-experimental design where treatment

group was further divided to old clients (90) who had been with MFIs for at least three years and new clients (15) who had been with MFIs less than a year or less than two loan cycles. In their study of poverty reduction, clients were found spending more in terms of major expenditure. They also show that per capita income for clients is higher than non-clients. They have found statistically significant difference (10% level) in incomes when they compared clients to non-clients. Their empirical findings also show that savings per capita is higher for both old and new clients compared to non-clients. Moreover, their findings represent that one in five households were multi-dimensionally poor, with non-clients' households being poorer than microfinance clients' households. Most importantly, branches of CBI were not near to the town centre, which demonstrates that they are located at hard-to-reach areas where usually people are out of the financial support in terms of distance. Their findings demonstrate that MFI not only increases clients' income and savings, but also confirms that people from rural areas have access to credit who desperately need the service. In the conclusion, their study suggests the Philippine government to follow a policy for promoting microfinance considering its potentiality to reduce poverty. Another study of poverty reduction also reported surge in clients' savings (Adjei et al., 2009). Using cross sectional data from 547 respondents (316 old clients, 231 new clients) of Sinapi Aba Trust (SAT), the largest MFI in Ghana, they mentioned that the amount of loan received by respondents is highly statistically significant while individual characteristics are not. Using a multi-stage sampling method, they have collected data from two groups, where 316 respondents were established clients who had received at least four loans over the period of two years and 231 respondents were new clients who were either due to receive any benefits from loan facility yet or they were on their first loan cycle. All the clients who received the loan were required to deposit 10% of the loan prior to the disbursement of the loan. This study suggests that 11 Cedis (Ghanaian currency) including the voluntary savings of 1 Cedis is added to the savings account when the loan increased by 100

Cedis (Adjei et al., 2009). Nevertheless, other explanatory variables such as education and length of memberships are found insignificant.

It can be summarised from the above-mentioned studies that women's access to microfinance provides the opportunity to start income-generating activities, though these opportunities have not been used appropriately as a significant portion of the loan has been used for unproductive activities. Also, only financial access is not enough to transform the economic condition of these women as they are unaware of proper investment and administration as well as they lack education. Moreover, increase in businesses does not necessarily improve financial condition of borrowers. Microfinance is further accused of putting the borrowers in worse financial condition by increasing their debt. Nevertheless, access to credit is found to increase household consumption, household income and savings by some robust studies, though impact may change based on individual and household characteristics.

Based on above arguments, this study formulates following hypotheses:

Hypothesis 1: Women's access to microfinance services increase women's household income.

Hypothesis 2: Women's access to microfinance services increase women's savings.

Researchers are also divided in terms of increasing women's control over household finances after joining MFIs. For instance, a recent study by Ganle et al., (2015) reports on the control of microfinance funded enterprise, income and asset by women. Using five focus groups and 150 in-depth interviews in Ghana, they have mentioned that more than half of the respondents never had control on their invested businesses. 40% of respondents had no control over loan use and their businesses, thus, they had no control on accrued income and assets. Moreover, women's income from loan investment are snatched by their husbands. Factors include the patriarchal and social-cultural attributes confine women to have exercise control or the ownership of any kind of assets. However, some of the respondents intentionally handed over the loan to their

husbands in light of their inability to use the loan appropriately. There is an assumption that men are superior in using and managing finance (Todd, 1995) as their enterprises are more profitable. Nevertheless, they conclude that women who had significant control over loans are more likely to enhance their income and empowerment. Moreover, other research reported inappropriate use of the loan. Regarding the control over loan, in a study of loan use pattern, using British aided NGOs in Bangladesh, White (1991) reported that half of the women's loan used in men's businesses while another significant portion utilised for consumption and lending others for interest. This early study of microfinance used 15 co-operative groups and 40 individual interviews. In the case study of Actionaid in a sub-district called Bhola, it shows that there is a higher probability to use the loan by men when it is relatively larger. For instance, 37% of women were reported to have control on the loan amount of BDT 200 while only 17% retained the control when the amount is double. On the contrary, it shows the reversed scenario for men. For example, 19% men were found to use the loan when it is BDT 200 while 57% men retained the loan when the loan amount is double. It is explained by men's dominance in the household and their ability to run higher productive activities. Similar results were reported by another study by Goetz and Gupta (1996) of loan use and gender. They have conducted a qualitative study of 275 loans from four MFIs include GB, BRAC, TMMS and Government's rural poor programme called RD-12. They reported that only 37% of women were appeared to have full or significant control on loan while 63% of them had partial, very limited or no control at all. In terms of use, just 28% of the loan had been used on women's enterprises while it was 56% for men. Thus, MFIs disempower women and increase tensions within their family. They have identified the reasons behind the control or loss of control of loan such as women's marital status, nature of business and size of the loan. They found that single woman such as widowed, divorced and separated is more likely to retain full control as there is no presence of productive men in the household. Nevertheless, there is a possibility to hand over the loan to male relatives,

for instance, to her nephews and sons-in-law in exchange for interest or supplying food. Women might have full control on their loan use when the investment is made on more traditional women's work such as poultry and livestock rearing. However, degree of full control over loan followed a decline trend when the investment was made on men's job, for instance, rice trading and purchasing rickshaw. Their finding in terms of the impact of loan size is echoed by White (1991) as she also found that women are more likely to lose the control of relatively larger loans. Women's membership length with MFIs is also related to control over loan use. Women with three to five years of membership have comparatively higher degrees of loan control. They have mentioned that control over loan rise in tandem with an additional year of membership. It is enlightened by women's experience on managing businesses over the years, and access to training opportunities that facilitate them with increased competence and confidence. Nevertheless, women's loan control appeared to diminish for those who were the members for six years and more. It is explained by women's limited expansion of productive investment after a certain period compared to their men counterpart.

Weber and Ahmad (2014) also utilised loan cycle in their study of financial and social empowerment. They have reported the evidence of women's financial empowerment based on women's control over loan use compared to control group. Using 90 women clients (60 in treatment group with at least five years of membership, 30 in control group with first year of membership) of Kashf foundation, an MFI in Pakistan they have mentioned that loan in the control group were more likely to be used by their husband. Regarding the control over resources, Hashemi et al., (1996) reported mixed results using a survey of 1300 married women from GB and BRAC. The findings show that none of the women had any control in one village of BRAC while 70% of women had full control (every aspect of the enterprise including marketing) in other village. In the Grameen villages, 27% and 63% had full or significant (keeping accounts and control over funds but not engaged in market transaction) control

respectively. They suggested that engagement with credit programmes empowers women. They have further pointed out that women had far fewer control over their businesses in older villages where GB and BRAC have been operating at least for eight years. For instance, 60% of women had full control over their loan in new BRAC villages where none of the women had full control in old BRAC villages. Their empirical findings show that years of membership with both BRAC and GB is statistically significant to impact the ability to make small purchases such as kerosene oil, cooking oil and spices. It shows that the longer the membership is either with BRAC or GB, the more the likelihood that she will be able to make small purchases. They also revealed that clients of GB have engaged in important family decision-making while clients of BRAC significantly increased freedom of mobility. Both interventions impact women's financial security, ability to make little and big purchases, legislative and political cognizance, and contribution to households.

To make some notes from the above studies, credit received by women from MFIs are not fully utilised by them either intentionally or unintentionally. However, it is not always the case that the loan is snatched by their husband or other household members, rather women's lack of previous experience of running a business potentially drive them to hand over their loan to their husband as men's businesses are productive and profitable evidently, however, it does not necessarily denounce women's control on other household resources. Women might get more control over resources, as in most cases, loan is used for business purposes, either by women or their husband, thus, there is a probability to have a surge in household income and savings. Consequently, women's status in a possible uplift by their ability to fund a household consumption or household enterprise. Above arguments formulate the following hypothesis:

Hypothesis 3: Women's access to microfinance services increase women's control over finances.

3.11 Literature review of microfinance and women's social and political empowerment

Economic empowerment does not necessarily confirm women's improved status of their bargaining power in households and communities. Empowerment is a composite construct utilised in the community, social science and management research sociology. It is a phenomenon which cannot be straightforwardly perceptible (Mahmud et al., 2012). Practices and attitudes may be utilised to quantify empowerment in one society might be irrelevant in other societies. Despite having homogenous population concerning language and tradition, living style of women varies on account of little contrasts in social standards and geography, the physical framework, and the design of financial and social environment (Hashemi et al., 1996). Also, someone is empowered in one dimension does not necessarily empowered in other dimensions. To illustrate, improvement in economic status does not infer that women are able to decide the use of contraception and other non-financial issues (Swain & Wallentin, 2017; Kabeer, 1999). Consequently, women's economic growth such as increased income and savings do not automatically empower in social and political dimensions of empowerment. Thus, empowerment of women is biased and incomplete when it is judged on inequality and does not include non-economic dimensions of decision-making power both within the family and outside the family (Khan & Noree, 2012). Consequently, this section reviews the literature on women's social and political empowerment.

Opportunity of securing business investment through access to financial resources are expected to reinforce bargaining power of women in their families, thereby, enable them to participate in crucial decision-making process (Hashemi et al., 1996). Swain and Wallentin (2017) inspected the effect of microfinance on components empowering women using a quasi-experimental designed survey. Using the data of 659 households from five states in India, their study estimates whether financial or non-financial variables lead to the process of empowerment. The results of their study show that financial factor is the most grounded reason

for empowerment in southern states (Andhra Pradesh and Tamil Nadu). They mentioned that women's credit invested to generate income and assets which lead them to have a greater bargaining power and decision-making opportunity. On the contrary, they also mentioned that more gain in autonomy of decision-making drives to a decline in women's empowerment in southern states. It is explained by women's lack of ownership of assets/loans which is important for women's empowerment. It is corroborated by the study of Garikipati (2008) as she argued that increased household assets and incomes do not necessarily empower women unless they are the co-owner of the properties and assets. For other states (Uttar Pradesh, Odisha and Maharashtra), they reported positive correlation between women empowerment and non-financial factors such as communication, political participation and agency of decision making. Their findings demonstrate that access to credit and agency in decision-making on work related decisions must be supported by women's control over loan-created assets to impact women's empowerment. They recommended that economic empowerment through income generation must be prioritised to pursue women's empowerment. They also suggested for greater focus on training, education and increased investment in social intermediation. A research on microcredit and women by Pitt et al., (2006) shows the evidence of social empowerment in Bangladesh using the data of 1998/99 household survey which was a follow-up survey of 1991/92. Both surveys conducted by the Bangladesh Institute for Developments (BIDS) with the collaboration of the World Bank. They suggested that outcomes are reliable with the view that women's engagement with microfinance programmes drives them to play a more noteworthy role to participate in family decision-making, increased communication between the husbands and wives, confirms the availability of financial resources, noteworthy interpersonal organisations and more bargaining power. They have further informed that women's credit significantly increased women's power in terms of decision-making on household borrowing and the manners of expenditure of that fund, purchasing livestock,

household loans and land/equipment transactions. Women's credit also positively impacts the family planning dialogue with their husbands. It increases the likelihood that women are able to discuss the issues such as the use of contraception and methods, number of babies they may take and children's education. They have further reported that men's credit has generally negative impact on the above aspects of empowerment. A recent study of empowerment in socio-economic context conducted in Ghana by Ganle et al., (2015). They have utilised the pathway frameworks of empowerment. Collecting data through five focus groups and 150 in-depth interviews, their findings demonstrate that women's positions have strengthened along several measurements in the wake of gaining access to credit. In terms of involvement in household decision-making, they asserted that women are able to make decisions within the household after joining the programme, even in the case of losing control of loans and enterprises to their husbands whether forcefully or voluntarily. Their ability in bringing the credit to their households has enabled them to exercise the new authority. Nevertheless, some women were found to receive verbal abuse and physical assault from their group members when they failed to pay the instalment as it has impacted their credit score being in the same group. Some women mentioned seizing of their household items by other members to collect the instalment. Their findings represent that the effect of microfinance programme relies upon the financial and social settings where it is executed, and women may encounter benefits and impediments approaching credit contingent upon their conditions whether they can service their debt or not. A research in Northern Tanzania by Goldman and Little (2015) adopting mixed methods also shows expanded individual autonomy in the family and augmented political participation at the societal dimension after the engagement with NGOs. They have collected data from two districts of Northern Tanzania, namely Monduli and Longido through interviews over a period of four years from 2009-2012. They have utilised 170 surveys and 68 interviews and 150 hours of ethnographic observation along with informal discussions with the

samples from two NGOs. They emphasised that empowerment must happen on both individual participants and societies at large to result genuine transformative change. Their model of empowerment suggests expanded autonomy and accomplishments within a specific setting of assets and resources. They have contextualised this to reflect local power dynamics and existing social attitudes about the diverse ways where power plays out inside family across the different generations of women, between men and women, and across the community. They have reported that comparatively younger women have picked up the capacity to exercise new forms of power compared to older women, for example, capacity to settle on choices within the family; *power within*, to ponder a spouse's entitlement to beat them and to address other gendered societal structures; *power with* others by standing up and talking at meetings. Also, achieve the official recognition of that power what they have always pursued such as change of social norms. Challenging the social norms is also mentioned by Swain and Wallentin (2009). They referred the empowerment through the indicators beyond households. They signified the empowerment as a procedure in which women enhance their prosperity by questioning the current standards and culture in which they live. They contended that more noteworthy effectiveness in women's family exercises or their execution inside the current social norms do not prompt strengthening of women's status. In a similar manner, network advancement activities lead to family welfare yet do not straightforwardly empower women.

On the contrary, from a systematic review, Kabeer (2017) reported that neither involvement with microfinance nor women's earning capacity have much effect on progressively coercive aspects of family connections, for example, apportionment of women's valuable belongings and confinements on their capacity to work outside home. They stated that microfinance involvement decreases the occurrence of violence, however, it works through the extension of women's social connections and the probability of private issues getting public as opposed to the improvement of their earning capacity. It might be because of increment on income through

microfinance is negligible to even think about impacting aggressive behaviour at home. Then again, substantial amount of credits may decrease aggressive behaviour through lowering stress on men as an essential and sole bread worker. In a study of autonomy of decision-making, Holovet (2005) reported mixed results of microfinance by using 497 women from two MFIs with similar operational characteristics. Her research was limited to one district called Dharmapuri in south India. This research has exhibited that immediate bank-borrower credit does not challenge the existing pattern of the decision-making, regardless of whether women or men were provided the credit. Women got a higher stake in issues straightforwardly associated with the loan utilisation, yet they cannot translate this into an increasingly critical engagement in various aspects of family decision-making. Nevertheless, if credit is provided through groups and merged with more prominent enthusiasm for social intermediation, substantial moves were noticed to develop in the decision-making pattern. There is, in general, an astonishing development from male dominating to even more bargaining and individual decision-making. These effects are essentially more striking when women have been a part of the groups relatively for longer period and explicitly when more thought is given to veritable social intermediation. On the other hand, Ngo and Wahhaj (2012) signified the importance of women's skills and competency on productive activities. It demonstrates that if women are not skilled and competent in doing productive activities, they might not increase their autonomy of decision-making within the households. Theoretical results of their study suggest the possibility of women's increased authority of decision-making power when capital is invested on joint productive activities with husband and a large portion of household budget spent on household public goods. Women have that possibility of increased bargaining power even in case of being in weaker bargaining position initially.

In the above-mentioned studies, researchers have argued many issues in terms of women's social empowerment. For instance, the importance of both financial and non-financial

resources for women's empowerment, however, it is also argued that impact of particular type of resources vary from one location to another. Women's capability to bring money into households, regardless the sources, is stimulus to practise authority as it can satisfy the needs of households. Moreover, age is identified as a significant factor to exercise power within the family. Furthermore, one of the studies mentioned that access to women's credit is not only enough to stop the aggressive behaviour, but also credit must be large enough. Besides, several studies pointed out the importance of women's group to make the credit more impactful in terms of decision-making. Also, some significant factors mentioned in the above discussion are women's skills and competency to increase their authority in decision-making process. Their arguments indicate that women's empowerment through credit programme is not straightforward and the impact is still not transparent, therefore, it needs to be examined further. Thus, current research formulates the following hypothesis.

Hypothesis 4: Women's access to microfinance services increase agency of decision-making.

The study of Ganle et al., (2015) suggests that women have significantly improved their freedom of movement in Ghana while running their business and generating income which gives them confidence, makes them fearless and self-dependent. Their findings suggest that most of the women were restricted in terms of mobility before receiving a loan. They have argued that women's restricted mobility creates constraints to involve with market transactions, hinders the opportunity to meet new people and to achieve new experience for their empowerment. One of the respondents of their study recalled her experience before engaging with loan programme. She mentioned that she had to ask money from her husband if she wanted to go somewhere. She could not go if her husband denied giving her money. Nevertheless, her circumstances changed once she started earning money, after engaging with the business. She was increasingly confident and fearless to travel several markets for business purposes as she did not have to rely on her husband. They further stated that along with the mobility, women's

exposure to the outside world was augmented through weekly group meetings which provides the scope of new ideas and opportunities as they had more interaction and communication. Nonetheless, mobility was further restricted for those who defaulted the loan, so that they can avoid the embarrassment and confrontation by others, consequently, access to credit has profoundly restricted freedom of movement for the defaulters. The study of Ganle et al., (2015) supports the role of credit programme in increasing women's mobility. They have emphasised the contribution of financial access and group meeting to form the base of women's confidence to break the shackle of confinement.

Weber and Ahmad (2014) examined the connection between the extent of empowerment and number of loans in Pakistan utilising 90 participants in treatment and control group. The treatment group had five years of cycle where the control group being in the first cycle. Their research exhibits that women in higher credit cycles of MFIs encountered a noteworthy increment in strengthening their position compared to control group. They likewise found a higher effect on the freedom of movement in treatment group opposite to control group. Their findings from Fisher's exact tests show that women in the first loan cycle are more confined with respect to their movement. Thus, it demonstrates that a greater number of loans is conducive to women's increased mobility. MFIs usually approve one loan a year to their clients, however the number of loans may depend on the policy of MFIs. They provide the next loan once the first loan is fully repaid. Second loan means clients are in their second year of membership with MFIs. Women's experience and confidence increase along with the increase of length of their membership as they have more chance to engage with officials and other members. Women are required to travel to MFIs' office to receive the loan and visit the centre to repay the loan weekly or monthly. Simply, it shows women in second year of membership have more movements than women in first year of membership because of the number of loans they receive and number of instalments they make. Moreover, those who start their business in

light of their access to credit are also required to travel because of their business purpose, for instance, visiting suppliers and customers to purchase and sell their products. Hashemi et al., (1996) also support the exposure of women outside home in terms of increasing mobility. Their study reports positive impact on mobility when it was compared between the members and the non-members. Using the data of 1300 married women, their findings show that clients of both GB and BRAC have increased their mobility within their villages in light of the attendance of weekly meetings. This result echoed by Ganle et al., (2015) as they also notified the importance of weekly meeting to impact the self-confidence and mobility. Women also had the opportunities to travel outside the villages as they had to visit the local branch which is situated outside their village. Moreover, they had to join the occasional training programmes arranged by MFIs. Nevertheless, women from BRAC are found to have higher levels of mobility than GB as it provides more opportunity to clients in terms of participation in training which requires travelling to different areas of village and even, outside village. Moreover, it arranges programme on which discuss social and political issues.

Study of Mahmud et al., (2012) somehow denounced the positive impact of microfinance in mobility. Collecting data of 3500 samples of married women from 128 villages of Bangladesh using the questionnaires, they reported that only 4% of women joined the meeting in the village and 20% visited the market. Only 13% of women visited clinic and friends outside the village without seeking permission. Low score on women's mobility was enlightened by women's employment outside home. Those women who work outside do not require any consent, nevertheless they need consent when they go out for other reason. It is not only MFIs that create the scope for more freedom of movement, it also depends on whether women are employed. They also mentioned the probability of higher mobility scores for those who have higher levels of schooling and watch television frequently. Regarding this, Mahmud et al., (2012) pointed out that adult literacy is lower for women in Bangladesh, therefore, they have limited source

of information. In this case, watching television and radio work as a proxy of education as it informs the contemporary issues, thus, encourage women's mobility. The study of Mahmud (2003) was further critical regarding the impact on mobility. In a study of empowerment and microcredit by Mahmud (2003) using longitudinal data from 2000 households in 91 villages from 22 Thanas (sub-districts) of Bangladesh suggests that microfinance programmes have restricted direct impact in expanding women's entrance to decision improving resources. Among 91 villages, 80 of them were programme villages and 11 were non-programme villages for comparison with respect to geographical attributes and infrastructure. Collecting data through in-depth interviews, Mahmud mentioned that women participants increased their movement to NGOs and health centres compared to non-participants, however, their mobility to public domains such as banks and bazaars did not improve. She further pointed out that women's mobility to NGOs and health centres was inferior as choice-enhancing. Ability to visit public places like bank or bazaar have more significance for women as they are not seen frequently in light of cultural practice such as veiling norm, thus, these places are considered as men's place. Empirical findings of her study show that women's mobility in the public domain was restricted as well as negatively related with the degree of male dominance. Findings of her study is consistent with the study of Mahmud et al., (2012) in terms of their findings on women's mobility in public domain. On the contrary, a very recent study on social networks, mobility and political participation in India reports that members from SHGs had greater mobility compared to non-members (Kumar et al., 2019). This study used a baseline survey of 2744 women in eight districts of five states in India. Their findings show that women from SHGs have more probability to attend the meeting of adult women as well as village meeting (both male and women adults) where they do not require any permission from husband or other household members. Their finding is similar to Ganle et al., (2015) as they have also reported women's increased mobility after joining the credit programme. Nevertheless, they

did not use the indicators which were mentioned by Mahmud (2003) such as visiting outside village or market where women are considered more empowered when they have access. Current research includes these indicators suggested by Mahmud.

From the above-mentioned discussion, women's access to credit programme provide them the opportunities to get exposure to resources, new people and information. Thus, they gradually find an alternative resort and become capable in many aspects. Above studies identified some factors such as education, information, group meetings and employment which influence women's freedom of movement. Some argued that women's mobility does not increase at all, or does not increase to a great extent, or in some cases, women further confined to their houses in light of their access to credit. Paradoxical nature of these studies demonstrate that it needs further examination. Thus, above mentioned arguments formulate the following hypothesis.

Hypothesis 5: Women's access to microfinance services increase women's mobility.

Very little attention has been given to the political empowerment relatively in the context of microfinance. Therefore, it remains a question whether the services of microfinance translate into political empowerment. One of the notable studies is conducted by Kabeer et al., (2012) to assess the political empowerment of poor people in Bangladesh who are the participants of NGOs. Using the data of the clients (100 new clients, 200 old clients from each NGO) of six NGOs in a mixed method study, they reported heterogeneous impacts on community and political participation. To illustrate, regarding community participation, clients from the six NGOs are found to accompany others to government offices and consulted by others too. It demonstrates uplifted authority and status of clients because of NGO participations. Older members of more socially oriented NGOs are found to participate in village committee and shalish, nevertheless participation of poorer clients remained low. Clients are also found in taking collective action such as protests, campaigns and petitions on questions of their rights,

violence, entitlement and justice. Clients of MFIs such as GB, BRAC and ASA had lower participation relatively than socially oriented NGOs. Older members are reported to have higher level of participation. With respect to political participation, they mentioned that clients are more likely to interact with elected representative than with the local administration officials. It happens because of representative's residence in the same area while local administration officials are posted to a particular area for their job. Higher levels of voting across the six NGOs was observed compared to lower level of campaigning. Their study further reports that the duration of membership, age, gender and education were significant predictors in political participation. Their findings demonstrate that socially oriented service is important to make the participants confident to participate in the community committee and for their collective action too. A significant point to be noted here is the participation of poor people in the village community is remained low. Therefore, it can be said that relatively wealthy people have more chance to be the part of the committee regardless of their membership with the NGOs. Moreover, older people are more likely to join the participation and collective action. This can be explained by the cultural practice of Bangladesh where seniority in terms of age is considered as a quality to be part of an important issue.

Sanyal (2009) examined the impact of access to credit on collective action of women in microfinance groups. She has explored the social empowerment where it was centred on women's capacity to address social issues in their networks and impact social norms. Utilising ethnographic information of 400 women from 59 microfinance groups of two NGOs in India, Sanyal reports that around 33% of these groups took different collective activities (*e.g.* action against domestic violence, organising events, acquiring public goods, interfering to stop child marriage, campaign against gambling) during their two to seven years of presence. For instance, several groups interfered to stop domestic violence and terminate underage marriages. This exhibits the capability of microfinance groups in fostering women's social capital and

normative influence. They have identified several factors which are behind the promotion of social capital and normative influence include economic ties, group connection and group participation. Economic tie ingrains trust and intimacy through successive co-operation's; networks shape expenses and advantages of sanctioning and builds the capacity to organise; and women's autonomy increased by group participation. She points out that economic tie was saturated with the trust and social content. Moreover, consistent interaction through the group meetings plays a noteworthy role to create the social capital. She has further argued that group-based ties are more effective than personal ties to promote women's capacity for collective sanctioning. The argument behind supporting group-based ties is that it provides freedom of association which was not accessible to these women. In her last argument on material and non-material incentive, she mentioned that material incentive, for instance, access to financial resources effectively inspired these women, burdened with poverty and social restrictions to participate in the microfinance groups, nevertheless, non-material incentives are the most effective. Sanyal's study in India is one of the examples of positive impact of microfinance with group-lending methodology. Though the aim of the studies of Sanyal (2009) and Kabeer et al., (2012) is similar, their studies are different to each other in terms of the methodology including samples, variables and the location. Nevertheless, both studies agree on the effectiveness of social oriented services of microfinance on the community participation and collective action of women.

Goldman and Little (2015) conducted an empirical investigation of engagement with NGOS and women's empowerment in Tanzania. Their study measured the political participation through women's participation in social meetings and standing up to speak in the meeting. They report the positive impact NGO involvement on women's political participation. Firstly, they have found that whether NGO involvement (*e.g.* number of meetings attended, speaks at meeting, participation in business, participation in adult education) impacts their personal

agency (*e.g.* household decision-making, making decisions in buying livestock, making decisions in selling livestock). Their result shows political participation of women is positively impacted by personal agency. Finding of the study further shows that the political participation is impacted by the wealth of the clients and NGO involvement. Members of NGOs were able to organise their political forums. Women have organised their own meetings to discuss the problems and set of activities. Their participation in education programmes and meetings provided the scope to learn their political rights, women's rights and power of participation. Thus, they build up their faith and confidence to raise their voice at the meetings and encounter personal, household and social customs at the same time. Also, their own political forums provide the opportunity to interact with men as leaders, create a stronger voice in all social aspects and challenge the gender based social norms and attributes. Most significantly, NGOs had supported and perceived women as leaders, thus they were able to be the part of the community decision-making process. Goldman and Little (2015) have emphasised that the activities of NGOs were not limited to teaching women regarding their rights and capabilities, it has also created institutional setting which have made a domain where role of women can be re-thought in the society. Their study has clearly pointed out the effectiveness of education in terms of political participation, social norms and women's rights. It can be suggested, from the findings of their study, that NGO with non-financial services is more effective in political empowerment of women.

Hashemi et al., (1996) also explored the political participation of women from GB and BRAC in Bangladesh. They have mentioned that 'Sixteen decisions' of GB and 'Seventeen promises' of BRAC facilitate to encourage a greater social and political awareness. Nevertheless, members of GB just memorise these and recite where BRAC put more emphasis on discussion in the meeting. Thornton et al., (2000) assert that how the employees of microfinance signify weekly meeting as 'loan collection meetings' where very little is discussed in this meeting

besides loan related issues. Such associations are probably going to create 'thin' types of social capital, not sufficiently able to go up against undemocratic practices at the neighbourhood and, national dimension (Rahman, 2006). However, Hashemi et al., (1996) report the relationship of membership duration with women's participation with political campaign. They have mentioned that impact was greater on political/legal awareness for BRAC than GB. This is explained by more opportunities from BRAC for its clients in terms of training which allow them to travel outside the village, as well as its focus on social and political awareness.

Above-mentioned studies emphasised the significance of non-financial services with respect to women's empowerment in political dimension. However, women's participation with MFIs is triggered by access to financial resources as most of them would not join the programme if it was purely on education and social benefits. Also, it is understood that women are more likely to involve with politics when they are socially empowered. Above arguments formulate the following hypothesis.

Hypothesis 6: Women's access to microfinance services increase women's community and political participation.

3.12 Conclusion

To summarise the chapter, women's exclusion from financial services and their absence in financial market jeopardises their personal life, also it is detrimental to the economy. They are considered as second-class citizens as they are not allowed to join the outside world in many ways and thus, economies are having ruining effects. Women's existence in economic activities is negligible due to wide range of impediments, however, lack of access to financial resources is the most recognised as it has been frequently argued that financial insufficiency obstructs women's entrepreneurship and their participation in the economy (Aterido et al., 2013). Identifying the need of women's access to financial resources, microfinance started including

women to the financial system predominantly since 1970s to relax their financial constraints with an objective of poverty reduction. Women have been at the centre of the microfinance since its inception in 1970s on the ground of their powerlessness. Though their better repayment behaviours are also viewed as significant reason for their inclusion later. After analysing the data from 350 MFIs in cross-country study include 70 countries, D'espallier et al., (2011) found that MFIs with women clients have significantly larger repayment rate.

With the expansion of microfinance, women's empowerment drew the attention of the researchers where empowerment has been defined in manifold ways in light of its relevance to multiple dimensions. As empowerment has its multiple perceptions, it must be measured in multiple ways. Determinants of empowerments vary dimension to dimension as determinants of one dimension is not relevant to other. However, women's empowerment in all dimensions are equally important for their sustainable development as well as for the whole economy. Researchers have different opinions on the impact of microfinance on women's economic empowerment. While some of the studies focused on household income and savings, there are few studies such as Goetz and Gupta (1996), Weber and Ahmad (2014) and Ganle et al., (2015) concentrated on women's control over finances and resources. On the other hand, women's social and political empowerment are under researched. Therefore, in light of paradoxical nature of studies of microfinance and women's economic empowerment, fewer studies on women's social and political empowerment, lack of theoretical underpinning, this research intends to enrich the literature and fill the gaps with a view to develop an effective model for microfinance for women empowerment in economic, social and political dimensions.

Chapter 4

Research methodology and methods

This chapter discusses methodologies and methods that have been applied to conduct this research. It begins with the discussion of the paradigms of philosophy and the research approach. Then, it highlights the research design includes research strategy, choice and data collection technique. Moreover, it explains the variables along with their validity and reliability. Further, it illustrates the ethical issues and the ways of surveys conducted in this research. Lastly, it discusses the data analysis methods and their suitability for this research followed by the conclusion.

4.1 Research philosophy and approach

The adoption of research method depends on the types of research philosophy and nature of the research question. The research philosophy represents the way the researcher adopts the significant assumptions to see the world. There is a misconception that one research philosophy is better than other while the truth is, they are better in doing different things. The research onion suggests that, one specific research question does not fall into one philosophy (Saunders et al., 2016). Selection of research philosophy depends on the research questions the researcher wants to answer (Guba & Lincoln, 1994). They also suggest that questions of methods are secondary to the questions of research paradigms- epistemology, ontology and axiology. Moreover, Johnson and Clark (2006) stated that knowledge on philosophical commitment is highly important for business and management researchers as it has significant impact not only what is done in the research but also what researchers understood about the investigation. They also mentioned that researchers should have the ability to reflect on philosophical choices and defend them against the alternatives which could have adopted as part of the strategy. Research philosophy provides the forms and nature of the reality (Ontology) and ways of understanding

the valid knowledge (Epistemology). They are different from each other in the views of the researcher on the research process.

The two main philosophies are positivism and interpretivism which indicate two extreme ways to view the social world. There is a debate frequently framed to choose either the positivist or interpretivist research philosophy. Critics of positivism argue that humans are not separated from the social context (Collis & Hussey, 2014). Consequently, perceptions of people in the social world are significant to understand the complexity of this world. The subjectivist view is that social phenomena are created from the perceptions and consequent actions of social actors. Remenyi et al., (1998) stressed the necessity to study the details of the situation to understand the reality or perhaps a reality working behind them. Interpretivism suggests that humans are different in their role to play as social actors. For example, if it is decided to study the situations of customers of a company, they may have different interpretations on the issues they find themselves. So, individual customer will have different opinions because of the consequence of their own view of the world (Saunders et al., 2016). To investigate these differences, it is necessary to deploy range of methods such as interviews and observations, instead of statistical analysis. It follows the qualitative research methods where cross-cultural differences in organisations, issues of ethics, leadership and management, factors influence the leadership can be scrutinised rigorously. Collected data are analysed in qualitative way in this paradigm. Here, collected data are more likely to be highly valid with a small sample because the data tends to be trustworthy and honest (Saunders et al., 2016). Interpretivists are believed to attach to inductive approach which considers various perspectives of the stakeholders from the community to analyse the data (Smith, 2006). In terms of inductive approach, the researcher generates theory from the research findings (Bryman, 2012).

On contrary, positivism demonstrates the view of natural scientist (Collis & Hussey, 2014) where researcher works with an observable social reality (Saunders et al., 2016). They believe

that scientific method can be used in social science to solve the problem of social issues like any natural science. This paradigm considers only what can be scientifically verified and logically as well as mathematically proven; consequently, it rejects metaphysics and theism. In this paradigm, the role of the researcher is not to explore the social reality but to measure it (Collis & Hussey, 2014). The positivists define the social reality through observation and investigations to develop a theory. The researchers who are positivists are more likely to use deductive approach. In terms of deductive approach, researchers suggest hypotheses from theories and conducts research to test them (Bryman, 2012). The process of deduction starts with the development of hypothesis, and then plan a research strategy to test the hypothesis rigorously after collection and analysis of quantitative data.

Like research philosophies, the difference between the research approaches does not imply superiority over each other. However, it is argued that the deductive approach is the most common approach to acquire knowledge in the social science domain (Eriksson & Kovalainen, 2008). This approach has many significant characteristics. Firstly, there is a search for explaining causal relationships between the variables. For example, if a researcher wants to find out reasons for high absence in clothing shop, he or she needs to study the absence patterns and it seems that there is a relationship between absenteeism, the age of workers and length of services. Therefore, there will be a hypothesis such as young workers are more likely to be absent from the work who worked comparatively short period of time. Secondly, concepts are required to be operationalised in a way that enables facts to be measured quantitatively. Finally, *generalisation* where it needs a large amount of sample. Therefore, considering the nature of the objectives and question, characteristics such as ability to result causal relationship, quantitative data and generalisation, this research has decided to adopt the positivist view of philosophy along with deductive approach.

4.2 Research design

The research design presents a framework for data collection and analysis (Bryman, 2012). Research design is a process of transforming a research question into a project. Hence, it is a plan that researcher uses to answer the research questions which includes research strategy, time horizon, and choice of collection techniques and procedures (Saunders et al., 2016). Following sections represent research design through strategy and data collection method.

4.2.1 Research strategy and time horizon

Research strategy refers to ‘a general orientation to the conduct of social research’ (Bryman, 2012). No research strategy is inherently superior or inferior over other. Therefore, the most important aspect of research strategy is to enable the researcher to answer research questions, achieve research objectives, match resources and time (Saunders et al., 2016). The explanatory part of this research is to identify the causal relationships between the variables. Here, survey strategy of structured questionnaire is constructed. The survey strategy allows the researcher to collect data which can be analysed using descriptive and inferential statistics. Moreover, collected data can be used to suggest possible reasons for relations between the variables and to construct the models of these relationships. As far as the research samples are concerned, the researcher aims to reach at least 384 respondents where survey strategy is the most appropriate to collect a large amount of data in a highly economical way (Saunders et al., 2016). Besides, this strategy is perceived as authoritative by people in general and is both comparatively easy to explain and understand. Regarding the time horizon, Saunders et al., (2016) mentioned that the most academic studies are usually time constrained. Likewise, because of time limitation, this research has chosen cross-sectional study.

4.2.2 Research choices

Research choice is the combination of data collection techniques and analysis procedures (Saunders et al., 2016). Qualitative and quantitative research approaches are different from each other in terms of data collection techniques and analysing procedure. Bryman (2012) mentioned that quantitative research emphasises on quantification in the data collection and analysis while qualitative research underlines words in the data collection and analysis. For instance, qualitative research may collect non-numerical data using the interview techniques whereas quantitative research may apply the questionnaire technique to collect numerical data and use a statistical data analysis process. This study applies the quantitative approach for several factors. Firstly, the research paradigm of this study is positivism which is coherent with quantitative nature of data and supports the quantitative approach of research. Secondly, most of the robust studies of microfinance and women empowerment used quantitative measures (Mahmud et al., 2012, Garikpati et al., 2008; Swain & Wallentin, 2009; Khandker et al., 2005; Deininger & Liu, 2013). After confirming the research strategy and research choice, the following section represents the data collection techniques of this research.

4.2.3 Data collection technique

According to Collis and Hussey (2014), data collection techniques for survey strategy incorporate questionnaires. The questionnaire is ‘a collection of questions administered to respondents. When used on its own, the term usually denotes a self-completion questionnaire’ (Bryman, 2012). The questionnaire is used to obtain insight on the relationships among different variables (Saunders et al., 2016). The design of a questionnaire differs according to how it is administered, specifically, the number of contacts researchers have with the respondents. Self-administered questionnaire can be administered in different ways such as electronically using the internet or intranet, posted to respondents or delivered by hand to each respondent. Moreover, electronic questionnaires may end up with lower response rate

(Bryman, 2012; Rea & Parker, 2012) because of limitations on online population and having various emails. The researcher has adopted 'deliver by hand' questionnaires as the main data collection tool. Justification of selecting this tool is that most of the samples of this research have low or lack of education where they are likely to misunderstand the questions. Therefore, it is highly required to make them clear about the questions and objectives of this research which is only possible through short discussion during handing over the questionnaire. Otherwise questionnaire may end up with '*uninformed response*' which reduces the reliability of data (Saunders et al., 2016) as it is anticipated that they have insufficient knowledge and experience. Secondly, self-administered questionnaire is highly convenient for collecting data from a large sample of people in a short period of time and relatively in a cost-effective way (Bryman, 2012). He also mentioned that self-administered questionnaire has many advantages over interviews including reduced cost, large number of samples, eliminate interviewer bias and variability and more responses. The researcher could select 'Electronic survey' instead deliver by hands but, it is anticipated that most of the samples of this study do not own any electronic medium. The designed questionnaires investigate the cause-effect relationship among microfinance products and services, women's economic development, women's economic, social and political empowerment. All the instruments and measures are taken from high-ranking journals to ensure the reliability and validity of the questionnaire.

4.2.4 Administering the questionnaires

Questionnaires were distributed to the respondents by the researcher and his assistants. An obvious problem the researcher had to face that very few respondents were able to fill up the questionnaires themselves because of their lack of reading skills. Therefore, the researcher had to complete most of the responses with the help of the research assistants. In terms of getting access to the respondents, the research assistants were immeasurably useful. Besides, their acquaintance with the local people and regional language proficiency have enormously helped

to amplify the response rate. The process of completing questionnaire started with the permission of each respondent. The researcher has explained the objectives of the research to the respondents and how their involvement is related to the research. The research assistants were very helpful to describe the terms in cases the respondents were unable to understand when the researcher explained. The researcher has asked the respondents whether they can complete the questionnaire. If not the researcher and his assistants asked the questions and completed the questionnaire on behalf of them. A total of 316 questionnaires were administered, however, 31 of the questionnaires were rejected because of incompleteness. 285 questionnaires were eventually selected to analyse the data though over 100 completed questionnaires are a reasonable number to conduct a statistical analysis.

The response rate = $(\text{completed questionnaires} - \text{rejected questionnaires}) / \text{Total distributed questionnaires} = (316 - 31) / 316 = 90\%$.

The questionnaire sample is based on the following criteria:

- Women clients of selected MFIs under the district of Cumilla.
- The availability of the women clients during the researcher's visit to the centre and their house confirming their membership checking their approved membership ID with GB and BRAC.

This study has segmented the respondents in three different categories such as respondents from villages, town and city where 85 from villages, 138 from town and 62 questionnaires were collected from the city. The researcher has categorised the samples in three groups to see whether geographical difference had any impact on the clients of MFIs. It was not possible to get equal number of respondents because of the limited outreach of some of the MFIs compared to the large MFIs. Because of the expanded network in Cumilla district, 73% of the respondents were from GB while only 27% of the respondents were from BRAC.

4.3 Survey population and sample size

Two major MFIs of Bangladesh, GB and BRAC have been selected for the purpose of the study. GB is the first MFI established organisation in Bangladesh. It is a noble prize-winning organisation; however, it is also the most criticised MFI in Bangladesh. BRAC is also a renowned MFI operating in eleven other countries besides Bangladesh. GB and BRAC are the largest and third largest MFIs of Bangladesh in terms of number of clients with the market share of 22.73% and 15.61% respectively as of June, 2017 (CDF, 2017). Not only in number of clients, but also on other indicators. These two are placed in top three in terms of number of branches, number of received loans, number of outstanding borrowers, number of loan disbursement, net savings and loan fund. Most importantly, they have the majority market share in terms of outstanding micro-enterprise loan with 28.43% and 16.89% respectively. The number of the clients of GB and BRAC are around 14 million (CDF, 2017) across all the districts of Bangladesh. Nevertheless, it is practically not possible to reach such a huge amount of people. However, there is an argument on the sample size of the research where it is expected that selected sample size should have acceptable level of confidence and margin of error must be within acceptable limits. However, it is needed to estimate the likely response rate which is the proportion of the samples. This research used the following formula proposed by Saunders et al., (2016).

$$N^a = n * 100 / re\%$$

Where, n^a is the actual sample size, n is minimum or adjusted minimum sample size and $re\%$ is the estimated response rate. The percentage of response rate can be different based on the ways of collecting primary data. For instance, response rate is in between 10% to 50% for postal questionnaire while it is up to 90% for face to face interview (Neuman, 2005). According to Baruch (1999), approximately 35% of response rate is reasonable for most academic studies. Therefore, this research will use estimated response rate as 35%.

4.4 Sampling technique and sampling method

This research adopts purposive sampling technique for various reasons. Firstly, it is not possible to create a sampling frame as the clients of selected MFIs are multiple millions in numbers. Probability sampling technique is not appropriate for this research as it requires a sampling frame for selecting the samples. Moreover, time and cost play a significant role in choosing sampling technique where researcher was confined to create a list of population because of time limitation and limited fund. Also, the samples of this research are scattered in different geographical areas of Bangladesh which poses a potential impediment to reach the respondents. Also, purposive sampling is a technique to discover the multiple realities (Lincoln & Guba, 1985). However, researcher emphasised the purposive sampling as it is the most appropriate technique to enable the researcher to answer the research question. The benefit of this technique is that the researcher can overcome the problems associated with geographically scattered population (Saunders et al., 2016). On the other hand, quota sampling is not appropriate for this research as it is usually used for interview surveys (Saunders et al., 2016). Also, the population for this study is not under any specific group to select a sample from every group. The researcher did not need to include any other techniques such as self-selection, snowballing and convenience sampling as the researcher went door to door to approach the respondents.

The researcher has employed two assistants to facilitate the data collection who reside locally in Bangladesh. The research assistants were informed about the objectives of this research which was specifically mentioned in a cover letter of the questionnaire and asked to communicate the message to the respondents before administering the questionnaire. The cover letter with statements is highly important and contributes to enhance the response rate (Rea & Parker, 2012). The statements include the purpose and significance of this research, importance of the respondent's participation in this research, confidentiality, anonymity and safety of the participants (Saunders et al., 2016; Bryman, 2012; Rea & Parker, 2012). Lastly, it includes the

clear understanding of the contribution of this research to women and broadly, to the field of microfinance in Bangladesh.

4.5 The research questionnaire design

The design and the structure of the research questions are significant to ensure the internal validity, reliability of the collected data and the response rate the researcher wants to achieve. The accuracy of data depends on the valid questionnaire where reliability ensures the consistent collection of data (Saunders et al., 2016). Regarding the validity and reliability, Foddy (1994) emphasised the justification of the questions and answers. The research questions of this study consist of closed ended questions, also called as forced choice questions (De Vaus, 2014). This kind of questions provide several options to be selected by the respondents. In this research, the questionnaire is segmented by seven parts include demographic profile; personal finance, assets and income; access to finance and microfinance products; women's entrepreneurship; women's economic empowerment; women's social and political empowerment. Table 4.1 represents the questions included in the questionnaire.

Table 4. 1 Demographic characteristics, personal finances and provision of financial products and services

Section	Sub-section	Type of question
Demographic profile	Age	Close-ended with five multiple options
	Number of family members	Close-ended with three multiple options
	Number of children	Close-ended with four multiple options
	Women's educational qualification	Close-ended with four multiple options
	Husband's educational qualification	Close-ended with four multiple options
Personal finance, assets and income	Savings before joining MFIs	Close-ended with yes/no options
	Bank account before joining MFIs	Close-ended with yes/no options
	Household income before	Close-ended with six

	joining MFIs	multiple options
	Assets ownership before joining MFIs	Close-ended with five multiple options
	Assets ownership after joining MFIs	Close-ended with five multiple options
Access to Finance and Microfinance products and services	Amount of first microfinance loan	Close-ended with six multiple options
	Amount of current microfinance loan	Close-ended with six multiple options
	Types of loan taken	Close-ended with eight multiple options
	Name of the MFIs of membership	Close-ended with two options
	Usage of the loan	Close-ended with eight multiple options
	Monthly household income after joining MFIs	Close-ended with six multiple options
	Length of membership with MFIs	Close-ended with six multiple options
	Receive any education from MFIs	Close-ended with yes/no options
	Receive any training and development sessions from MFIs.	Close-ended with yes/no options
	Amount of savings in the account	Close-ended with multiple options

Table 4. 2 Increased abilities after joining the MFIs

Lands	Increase in lands after joining MFIs	Close-ended with five point Likert scale
House	Increase in immovable property house of women after joining MFIs	Close-ended with five point Likert scale
Other assets	Increase in other assets such as jewellery after joining the MFIs	Close-ended with five point Likert scale
Livestock	Increase in livestock of women's households after joining MFIs	Close-ended with five point Likert scale
Self-confidence	Increase my self-confidence after joining MFIs	Close-ended with five point Likert scale
Communication skills	Increase in communication skills after joining MFIs	Close-ended with five point Likert scale
Calculation/literacy skills	Increase in calculation/literacy skills	Close-ended with five point Likert scale

	after joining MFIs	
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Table 4. 3 Control over finances

Measure	Indicators	Data type
Women's economic empowerment (Control over finances)	I have regular personal spending money	Close-ended with five point Likert scale
	I can keep money from sale of livestock produce/poultry	Close-ended with five point Likert scale
	I have money for emergency use	Close-ended with five point Likert scale
	I can spend as I wish	Close-ended with five point Likert scale
	I can purchase daily food preparation items (Kerosine oil, cooking oil, spices)	Close-ended with five point Likert scale
	I can purchase ice-cream or sweets for the children	Close-ended with five point Likert scale
	I can keep my own wage earnings	Close-ended with five point Likert scale
	I can keep children's wage earning	Close-ended with five point Likert scale
	I can buy clothes for my children	Close-ended with five point Likert scale
	I can buy clothes for myself	Close-ended with five point Likert scale

Table 4. 4 Agency of decision-making

Measure	Indicators	Data type
Women's social empowerment (Say in household decisions)	I have a say in using household income and savings	Close-ended with five point Likert scale
	I have a say in applying for a loan	Close-ended with five point Likert scale
	I have a say in working outside home	Close-ended with five point Likert scale
	I have a say in buying furniture	Close-ended with five point Likert scale

	I have a say in schooling of my children	Close-ended with five point Likert scale
	I have a say in house repair and renovation	Close-ended with five point Likert scale
	I have a say in treatment of my sick children	Close-ended with five point Likert scale
	I have a say in visiting doctor for myself	Close-ended with five point Likert scale
	I have a say in my children's marriage	Close-ended with five point Likert scale
	I have a say in visiting father's home	Close-ended with five point Likert scale
	I have a say in using family planning	Close-ended with five point Likert scale
	I have a say in buying or selling livestock	Close-ended with five point Likert scale

Table 4. 5 Mobility

Measure	Indicator	Data type
Women's social empowerment (Mobility)	I can visit friends outside the village	Close-ended with five point Likert scale
	I can visit market alone	Close-ended with five point Likert scale
	I can visit hospital and clinic alone	Close-ended with five point Likert scale

Table 4. 6 Community participation

Measure	Indicator	Data type
Women's political empowerment (Community participation)	Participation in shalish	Close-ended with yes/no questions
	Membership of village committees	Close-ended with yes/no questions
	Accompanied others to government offices	Close-ended with yes/no questions
	Consulted by others	Close-ended with yes/no questions
	Participation in collective action	Close-ended with yes/no questions

Table 4. 7 Political participation

Measure	Indicator	Data type
Women's political empowerment (Political participation and	Voted in last local elections	Close-ended with yes/no questions
	Campaigned in last election	Close-ended with yes/no questions

knowledge)	Interacted with local administration	Close-ended with yes/no questions
	Interacted with elected officials	Close-ended with yes/no questions
	Consulted by elected officials	Close-ended with yes/no questions
	Know the name of the local parliament member	Close-ended with yes/no questions
	Know the name of the prime minister of the country	Close-ended with yes/no questions

4.6 Translating the questionnaire

The clients of the MFIs usually have low or no education. Therefore, it is assumed that most of the respondents of this study have no English language skills to understand the questions. Therefore, it was essential to translate the questionnaires into Bengali to achieve the response rate. Moreover, it had to be ensured that translation into Bengali language does not alter the meanings of the questions. As the researcher is from Bangladesh and his native language is Bengali, researcher has translated the questions to Bengali from English. It was also reviewed by a translator in Bangladesh.

4.7 Reliability and validity

There are three questions to be asked regarding the reliability of the research. They are:

- Will the measures yield the same results on other occasions?
- Will similar observations be reached by other observations?
- Is there transparency in how sense was made from the raw data?

Robson (2002) asserted that there are four threats to reliability. Firstly, participant error may produce different results at different occasions but it can be controlled by selecting ‘neutral time’. Secondly, participant bias may not provide their own views about the phenomena if they are not mentioned as anonymous. Thirdly, observer error is another threat to the reliability may

include approaching questions in different ways. Fourthly, observer bias may raise the concern of understanding and interpreting the responses differently (Saunders et al., 2016). Regarding the validity, they mentioned that validity is concerned with whether the findings are really about what they appear to be about. The researcher has applied the measures which were proven valid and reliable by previous studies. These studies were published in high-ranked journals according to the Association of Business Schools (ABS).

Table 4. 8 Scale sources

Variable	Sources	Journal	Rank
Access to credit	Ngo & Wahhaj (2012); Kabeer (2001); Mahmud (2003). Ganle et al., (2015); Goetz & Gupta, 1996).	The Journal of Development Economics; World Development; Development and Change.	3
Household income	Garikipati et al., (2017); Agbola et al., (2017).	The Journal of Development Studies; Journal of Rural Studies.	3
Women's savings	Chemin (2008); Agbola et al., (2017); Ashraf et al., (2010); Augsburg et al., (2015).	The Journal of Development Studies; Journal of Rural Studies; World Development.	3
Control over finances	Garikipati (2008); Mahmud et al., (2012); Hashemi et al., (1996).	World Development; Development and Change.	3
Agency in decision-making	Mahmud et al., (2012); Weber & Ahmed (2014); Swain & Wallentin (2017).	World Development; The Journal of Development Studies.	3
Mobility	Hashemi et al., (1996); Mahmud et al., (2012).	World Development; The Journal of Development Studies.	3

Community and political participation	Kabeer et al., (2012); Hashemi et al., (1996); Swain & Wallentin (2017).	World Development; The Journal of Development Studies.	3
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4.8 Pilot testing of the questionnaire

It is recommended to do pilot study before using the questionnaire to avoid any minor or major problems in answering the questions and in recording data which facilitates the achievement of research objectives. Moreover, pilot study enables the researcher to achieve some assessments on the validity of the questions and reliability of the data (Saunders et al., 2016). It ensures that questions are flawless and clear to understand by the participants. Moreover, it identifies the duration to complete the questionnaire and helps to explore if there is any change needed. Regarding pilot study, Bell (2005) mentioned the '*trial run*' of the questionnaire and he emphasised that without trial run, there is no way to know whether the research will succeed. Bryman (2012) also suggested that the pilot study ensures well operation of both the research instruments and questionnaire. Selecting the sample size of the pilot study is crucial to the research to get the best result of it. Fink (2003) stated that the minimum number of samples is 10, though between 100 and 200 responses are usual for the large surveys (Dillman, 2007). Other authors suggested that the samples between 10 and 30 are acceptable as it helps the data processing (Issac & Michael, 1995). Therefore, the researcher has decided to do the pilot test on 40 samples for the validity and reliability of the questionnaire. The researcher mainly focused on some issues such as duration to complete the questionnaire, clarity of the questions and instructions, whether any respondent felt uneasy to answer, minor or major topic omissions, clear and attractive layout.

4.9 Research ethical protocols

Research ethics are referred as respecting morals and values in each stage of the research from both the participants' and the researchers' perspectives (McNabb, 2015). Bryman (2012) mentioned that the ethical principles that researcher must ensure include avoiding harm, taking the formal consent, maintaining anonymity and preventing deception.

As far as informed consent is concerned, the researcher explained clearly every step of the purpose of the research and outcome to the prospective participants which allowed them to ask any questions at any time, this way the researcher came to know whether they are interested in participating or not. All the participants were asked to sign the consent form when they agreed to participate. A participation information sheet was provided to the participants which contained following information: study title, invitation paragraph, purpose of the study, why they have been invited, and about their voluntary participation. Regarding the openness and honesty, the full scope of the research and its objective described in a clear and transparent manner. However, to maintain openness and honesty, participants were also informed the following information: what will happen if they take part which includes the explanation of the methods of data collection, what are the questions and how long it will take. Moreover, it included any possible disadvantages or costs if they participate. It also contained the information on either there is any direct or indirect benefit to the participants. They were also notified that they can withdraw their participation during the data collection period. The researcher was committed not to make any harm to the participants during the data collection period and confirmed that the research does not involve any vulnerable groups such as the disabled and children. However, the participants were communicated clearly about each question. The researcher guaranteed that the research would not make any damage to any participant or the researcher himself, as far as the physical, mental, professional and other kinds of harm are concerned. To avoid above-mentioned harms, the researcher did not force any

participant to concede access for the research, and the researcher has promised to keep up the secrecy of data provided by the participants and their anonymity. Similarly, the researcher ensured not to persuade and pressurise the participants to acquire the appropriate responses that the researcher anticipated. Besides, the researcher maintained a strategic distance from embarrassment, pressure, inconvenience, torment and mischief to the participants which would cause during the data collection, analysing and reporting. To ensure the confidentiality, all the collected information of the participants was kept strictly confidential and only used for research purposes.

4.10 Data analysis methods

This research uses questionnaire to collect data following purposive sampling of 285 respondents of Cumilla district in Bangladesh. 85, 138 and 62 respondents were sampled from rural, semi-urban and urban area respectively. This thesis uses three types of analysis to analyse the collected data which include descriptive, bivariate and empirical logistic regression analysis. In bivariate analysis, Pearson's chi-square test can be used to find the relationship between two categorical variables (Fisher, 1922; Pearson, 1900). Therefore, this thesis uses Pearson's chi-square test to find the relationship between the categorical variables. The assumptions are met for chi-square test where data for the chi-square should be ordinal or nominal level which has two or more categories. Also, in larger contingency tables such as 2*3, all expected values should be greater than 1 and no more than 20% of expected counts should be less than 5 (Field, 2018). *Women's control over finances, increase in agency of women's decision-making, increase in women's mobility and increase in women's community and political participation* are found violating the assumptions of chi-square of expected frequency as some of them have expected counts less than 1 and more than 20% of cells have expected counts less than 5. Therefore, an alternative to Pearson's Chi-square is called *likelihood ratio chi-square* test (Field, 2018) which was used for these variables.

This research also has deployed Kruskal-Wallis test to find out the difference between the independent samples (Corder & Foreman, 2011). It was conducted to check the overall difference among the categories of the amount of loan and the area of the respondents and dependent variables- increase in control over finances, increase in agency of women's decision-making and increase in women's mobility. It was chosen because of its appropriateness as a non-parametric test that is analogous to parametric one-way ANOVA. It is also similar to the Mann-Whitney U test, to compare independent samples (Weaver et al., 2018). In this test, dependent variables should be measured at ordinal level (Gibbons, 1993; Lomax & Hahs-Vaughn, 2012) and no normality on the population distribution (Lomax & Hahs-Vaughn, 2012) where variables of this study are at ordinal level. Also, independent variables should consist of two or more categories where amount of loan has six categories and area of the respondents has three categories. It also has met the independence of observations (Corder & Foreman, 2011) which means that there is no relationship among the categories of independent variables. Moreover, it also met the assumption of similar shape in distributions of each group (Lomax & Hahs-Vaughn, 2012; Maxwell & Delaney, 2004). It allows the researcher to compare the medians of dependent variables for the different groups of the independent variable. Though Kruskal-Wallis test shows overall difference, however, it cannot identify the specific groups where difference occurred, therefore Post-hoc analysis is chosen to find out whether there is any difference between the categories. Post-hoc is a test of pairwise comparisons which compares the different combinations of the treatment groups. It can check a pair of groups through conducting a test to find the difference between the groups (Field, 2018; Corder & Foreman, 2011).

Lastly, empirical analysis is conducted using both binary and ordinal logistic regression because of their suitability in this research. For increase in household income, increase in savings and increase in community and political participation, binary logistic regression is

deployed to check the relationship between the dependent and independent variables in light of the dichotomous nature. It is a particular type of regression that is expressed to predict and explain a binary (two-group) categorical dependent variable. It functions like multiple regressions, it has direct measurable tests, comparable ways to deal with including metric and non-metric and non-linear impacts (Hair et al., 2006). The predictors do not have to be normally distributed, linearly related or of equal variance within each group (Tabachnick & Fidell, 2014). The data of this study is non-linear and each group is of different variance, therefore, researcher has found this appropriate for the above three variables. It is defined as the forecast of the likelihood of Y happening when given known estimations of X's (Field, 2018). However, probit regression has been used as an alternative to logistic regression in other research. The difference between these two is the applied link function. Probit regression uses the probit transform where each observed proportion is replaced by the value of standard normal curve (z value). On the other hand, logistic regression uses a logit transform of the proportion. Thus, probit assumes an underlying normally distributed dependent variable and logistic regression assumes underlying qualitative dependent variable. Assumption of underlying normal distribution makes probit regression is more restrictive to logistic regression in case of very high and low probabilities (Tabachnick & Fidell, 2014). Also, beta coefficient in logistic regression has easier interpretation than probit regression. For the interpretation of probit models, researchers need to look at plotted fitted values. Ordinal logistic regression is used for other three models-increase in agency of decision-making, increase in mobility and increase in community and political participation as data are ordinal type. Ordinal logistic regression can be considered as an extension of binary logistic regression (Scott et al., 1997) which allow more than two ordered categories. It is similar to multinomial logistic regression, however, categories are placed in order. Ordinal logistic regression is simpler than multinomial regression when dependent variable follows sequential categories (Tutz, 2012). A value of

these categories is supposed to be higher than previous one. As the dependent variable is in ordinal (Likert type) data, this study deployed ordinal logistic regression to test this hypothesis. In all the analyses except descriptive, amount of loan is reduced from twelve to six categories, and likewise women's control over finances, agency of decision-making and mobility are reduced to three categories from five, in order to interpret the results in a better way.

4.11 Conclusion

This chapter highlighted the research methodology from several perspectives including the research process. Research methodology includes the research philosophy, research approach, research design and sampling technique. This researcher has decided to choose the positivism as philosophical view along with deductive approach because of the nature of the research objectives and question of this research as well as the benefits of this paradigm and approach. Research objectives of this study can be achieved through deducing hypotheses from the existing theory and then testing the hypotheses by deploying the relevant methods. This research deploys quantitative research design because of the variables of the research are quantifiable. Moreover, content validity of the questionnaire was ensured through the pilot study. Also, the measurement scale of variables obtained from high ranked journals which further provided the validity of the selected variables. Finally, administering the questionnaires to reasonably a large number of samples following the research ethics supports the validity of the methods that was applied in this research.

Chapter 5

Microfinance and women empowerment in Bangladesh: Impact in economic dimension.

This chapter explores the impact of access to credit on women's economic empowerment in Bangladesh. It investigates how access to credit impact women's household income, their savings and control over finances. With the growth of microfinance operation in almost all the regions of Bangladesh, the poor women as the primary clients are facilitated with the financial access which they have been denied by the conventional financial systems historically. However, access to financial resources as investment is a precondition to accelerate the economic growth, nevertheless, it may not work for all, specifically for poor women as they have low or no human and social capital. They may not have the ability to use the finance appropriately. This chapter investigates whether women's household income, own savings and control over finances are positively impacted because of their access to loan of MFIs. Firstly, it presents the theoretical model and conceptual framework of this study. Secondly, it shows the methodology of the study. Thirdly, it shows the research findings followed by the discussion of the findings. Lastly, it draws the conclusion.

5.1. Theoretical model applied in this study

Resources are the precondition to achievement (Kabeer, 1999). Any resources that increase income would increase the welfare of the consumer too through relaxing the constraints (Khan et al., 2015). For instance, a woman who has sewing skills but cannot afford to buy a sewing machine might be able to relax her constraints if she is provided a loan to buy the sewing machine. Someone who buys an auto-rickshaw when provided loan might be able to increase income. If a farmer is provided the loan to modernise farming technique, which would increase productivity, thus, increase the income. If someone has cooking skills but does not have financial ability to set-up a small hotel in the market will not be able to increase income with

that skill. If the same person is provided loan as a capital to set up a hotel, she/he might be able to increase income.

Microfinance intends to expand the utility of the clients (Rika et al., 2015). Thus, amount of loan, area, income generating activities are considered as significant variables in increasing their income. Demographic factors such as education and age are also important to influence the income and savings and their control over finances. Besides institutional characteristics such as duration of membership with MFIs, and membership with GB or BRAC have a bearing to influence the income. Thus, increase in income works as one of the indicators of economic development and indicates a shift of utility indifference curve upwards. When increase in income takes place, consumption and savings is expected to increase as well and ultimately shows a sustainable way out of poverty trap. In all these cases, increase in income should uplift the standard of living conditions of people. This is called income augmentation effect (Khan et al., 2015).

5.2 A bargaining theory approach

Intra-household decision-making model developed by Becker (1981) has studied frequently with the theoretical framework of the unitary model of the household. However, researchers called for different types of models because of its enormous theoretical and empirical deficiencies (Osmani, 2007). The bargaining model of the household has been proposed by McElroy & Horney (1981) as an alternative to the unitary model where households such as husbands and wives interact with each other in order to enhance their own interests and to achieve common objectives through their bargaining power in the household. Two spouses interact with each other in the household decision making process. As husbands and wives have different preferences, the decision-making model which entails inequalities, bargaining and conflict reflects the real scenario. If they fail to reach agreement, they receive their initial utility

points. These utility points are described as the disagreement point, the fall-back or breakdown position.

This theory suggests that women's agency within the household depends on the strength of women's breakdown position. The stronger the breakdown position, the more the agency women have. The notion is that anything that can strengthen women's breakdown position can also empower them. This research hypothesises whether participation in the microfinance programme empowers women in a sense that access to credit can strengthen their breakdown position.

This research adapts the theory of McElroy and Horney (1981) which mentioned the relationship as:

$$B = B(H, X) \quad (1.1)$$

Where,

B = Women's breakdown position

H = Increase in women's household income

X= Individual and household characteristics

Taking H as a binary variable, H is equal to 1 if women have increased their household income and H becomes 0 if they have not increased income. The objective of the research is to test the hypotheses that women's participation in the programme improves their breakdown position conditioning on observed characteristics which is expressed as:

$$B = B(H=1 | X) > B(H=0 | X) \quad (1.2)$$

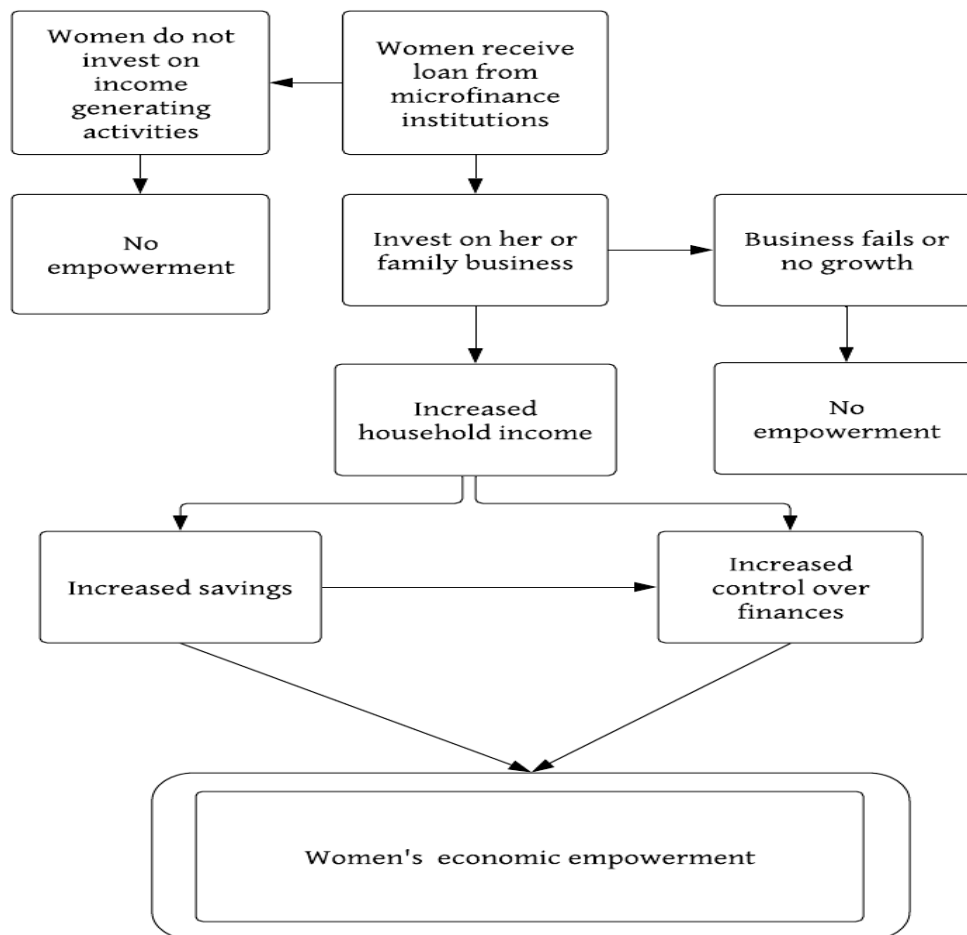
This research uses the women's breakdown position as an indicator of the empowerment of women. Equation (1.1) can be expressed as:

$$B(H, X) = Y(H, X) \quad (1.3)$$

The empowerment of women $[Y(H, X)]$ is measured as the breakdown position of women $[B(H, X)]$. This research uses several empirical measures of women's breakdown position such as increase in savings, increase in control over finances, increase in agency of decision-making, mobility and community and political participation. Last three variables analysed in next chapter as the part of social and political empowerment. Equation (1.3) will be tested as:

$$Y(H=1 | X) > Y(H=0 | X) \quad (1.4)$$

Figure 5. 1 Conceptual framework



In this study, women use that loan provided by MFIs to start a business or invest on an already established business; some of them hand over the loan to their husbands or other male members to conduct similar kind of activities. If they run the business, it is assumed that their household income and savings increase. Likewise, income-generating activities conducted by their family members also increase household income and their savings if the business is successful (Figure 5.1). Thus, they develop their personal and household economic conditions which eventually lead to increased control over finances.

5.3 Methodology

5.3.1 Empirical strategies

Model 1: Increase in household income

The first logistic regression model tests the first hypothesis. A hypothesis will be rejected if the p-value is bigger than the critical p-value of .05. It means the null hypothesis can be rejected if the p value is .05 or smaller. Logistic model equation with Logit (P), where P is the probability of an event taking place, X is a vector of covariates and β is a vector of regression coefficients.

$$\text{Logit}(P) = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \dots + \beta_n x_{ni} + \varepsilon_i \quad (1.5)$$

Therefore, the first model applied can be described as follows:

$$\text{Logit}[P(\text{increase in household income})] = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \beta_7 X_{7i} + \beta_8 X_{8i} + \beta_9 X_{9i} + \varepsilon_i \quad (1.6)$$

Where $\text{Logit}[P]$ represents the probability of respondents having increase in income. β_0 is the intercept. X_1 . X_9 are the independent variables where X_1 is amount of loan, X_2 is area of the respondents, X_3 is engagement with income-generating activities, X_4 is length of membership, X_5 is MFI membership, X_6 is age of the respondents, X_7 is education level of the respondents, X_8 is Husband's education level and X_9 is number of household members. This model is picked up considering the goodness of fit test which passed the assumption.

Model 2: Increase in women's savings

This model tests the second hypothesis, women's savings increase if they were given access to credit from MFIs. The model applied here can be described as follows:

$$\begin{aligned} \text{Logit}[P(\text{increase in women's savings})] = & \\ & \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \beta_7 X_{7i} + \beta_8 X_{8i} + \beta_9 X_{9i} \\ & + \beta_{10} X_{10i} + \beta_{11} X_{11i} + \beta_{12} X_{12i} + \varepsilon_i \end{aligned} \quad (1.7)$$

Where $\text{Logit}[P]$ represents the probability of respondents having increase in savings. β_0 is the intercept. X_1 - X_{12} are the independent variables where X_1 is amount of loan, X_2 is area of the respondents, X_3 is engagement with income-generating activities, X_4 is increase in household income, X_5 is respondent's savings before joining MFIs, X_6 is investment type, X_7 is length of membership, X_8 is MFI membership, X_9 is age of the respondents, X_{10} is education level of the respondents, X_{11} is Husband's education level and X_{12} is number of household members. This model is picked up considering the goodness of fit test which passed the assumption.

Model 3: Increase in women's control over finances

Ordinal logistic regression is used for this model as dependent variable is ordinal type. The model applied here can be described as follows:

$$\begin{aligned} \text{Logit}[P(\text{increase in control over finances})] = & \\ & \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \beta_7 X_{7i} + \beta_8 X_{8i} + \beta_9 X_{9i} \\ & + \beta_{10} X_{10i} + \beta_{11} X_{11i} + \beta_{12} X_{12i} + \varepsilon_i \end{aligned} \quad (1.8)$$

Where $\text{Logit}[P]$ represents the probability of respondents increased control over finances. β_0 is the intercept. X_1 - X_{12} are the independent variables where X_1 is amount of loan, X_2 is area of the respondents, X_3 is engagement with income-generating activities, X_4 is increase in household income, X_5 is increase in savings, X_6 is increase in land, X_7 is increase in other assets,

X₈ is increase in self-confidence, X₉ is length of membership, X₁₀ is MFI membership, X₁₁ is age of the respondents and X₁₂ is education level of the respondents, This model is picked up considering the goodness of fit test which passed the assumption.

5.3.2 Measurement of key variables

Several variables formulate the research models including access to credit, increase in household income, increase in women's savings, income-generation activities, area, savings before joining MFIs, investment type, length of membership, MFIs membership, household size, age and education. Following sections show how the study measured these variables.

(1) Access to credit

Firstly, independent variable, *access to credit* widely used in microfinance studies to assess the impact on women's welfare (Ganle et al., 2015; Ngo & Wahhaj, 2012; Swain & Wallentin, 2009; Mahmud, 2003; Goetz & Gupta, 1996). Nevertheless, access to credit has been used in the form of loan size received by the clients in these studies. Similarly, the amount of loan received from MFIs is deployed as a key independent variable of this study. It is measured at ordinal level.

(2) Increase in household income

Increase in household income (Agbola et al., 2017; Augsburg et al., 2015) is dichotomous, however, data on women's household income collected nominally with a range of income level and then compared before and after. Household income signifies the overall economic condition of the household, considered as an indicator of household welfare and poverty level. Increase in household income demonstrates the potential future consumption which prompts to higher standard of life. Nevertheless, though it is utilised as a construct to measure the impact of microcredit, it is difficult to get reliable and accurate measure of income because of inconsistent flow of money and source. Therefore, respondents may not report accurate amount of income in light of the above reasons. Moreover, income fluctuates on account of not having

a permanent source for some of the respondents. Therefore, to be precise on the amount of income, researchers require multiple visits to respondents, nevertheless, it would incur additional cost and time for collecting data in this way. Previous studies incorporated household income based on the respondent's memory of relevant data (Al-mamun & Mazumder, 2015). Similarly, this study had to depend on respondent's recall on income sources including income from business, livestock, agriculture which led to have a range of income level of households presently.

Increase in household income refers increase in monthly household income of the respondents. The researcher has collected data on respondents' monthly household income before and after joining the microfinance and compared data to find whether their household income increased or not. This study avoids the income from any kind of employment that does not have any relation to the credit amount. Thus, it avoids the issue of endogeneity.

(3) Increase in women's savings

In this study, *increase in savings* refers increase in women's monthly savings after joining the MFI. Savings is used in other studies to investigate the empowerment of women through microcredit (e.g. Agbola et al., 2017; Augsburg et al., 2015; Ashraf et al., 2010). In this study, respondents were asked whether they had any personal savings before joining the MFI. They were also asked how much they save monthly in their account after joining the MFI. It is quite convenient to know the accurate amount of savings of respondents as they have savings accounts with the MFIs. The amount they save both in general and fixed accounts weekly or monthly is considered as their savings. Women can start with 50 (BDT), which is equivalent to 0.60 (US\$ approximately). Nevertheless, this amount is not impactful considering the inflation rate (5.54%) in Bangladesh (Bangladesh Bank, 2019). Ergo, the researcher has decided to recognise increase in savings when any respondent had at least 500 (BDT) (5.95

US\$ approximately) monthly. If the respondent had 500 (BDT), it means she has increased her savings after joining the MFI. Thus, this research has compared women's savings before and after joining the microfinance.

(4) Increase in women's control over finances

Empowerment is not only measured by household income and savings, but also other indicators are also used to indicate empowerment. The studies of empowerment frequently include women's *control over finances* (Weber & Ahmad, 2014; Mahmud et al., 2012; Kabeer, 2001; Hashemi et al., 1996). However, control over finances is measured by several indicators as it is difficult to observe directly. For instance, some studies used women's control over loan and income to measure empowerment (Ganle et al., 2015; Goetz & Gupta, 1996). Control over finances is used widely in the literature (Weber & Ahmad, 2014; Mahmud et al., 2012; Garikipati, 2008; Pitt et al., 2006; Goetz & Gupta, 1996) to measure empowerment where resources include income, savings and assets. Following the previous studies' adoption of this variable, this study also deployed control over finances which is measured through the indicators from the studies of Garikipati (2008), Mahmud et al., (1996) and Hashemi et al., (1996) to measure empowerment in economic dimension. Indicators are mentioned in chapter (4).

This study assumes that those who had no control on any kind of finances before having access to finance, they may have increased their controlling power after getting the access to the credit from MFIs. It is assumed that women's ability to bring funds for their or other household members' business activities or any other purposes, increase their status within the household. Also, most of the explanatory variables used in the model 1 and 2, are also used because of their relevance to estimate control over finances. Also, both the dependent variables- increase in household income (model 1) and increase in women's savings (model 2) are used as independent variables. Empowerment in one indicator can sometimes lead to empowerment in

another indicator (Mahmud et al., 2012). Therefore, it is assumed that women's control over household resources increase when women's household income and savings increase. Specifically, this research considers women's savings as strong variable to have more control over finances. Moreover, membership of GB or BRAC and the duration may have potentiality to impact the power (Dutta & Banerjee, 2018; Weber & Ahmad, 2014) which has been used for all the models simultaneously. Contrary to first two dependent variables, increase in land (Mishra & Sam, 2016), increase in other assets and increase in self-confidence after joining the MFIs (all are five point Likert scale) are used as independent variables for this variable. Owning land is strong indicator of increasing wealth as it is comparatively expensive. Owning other assets also may impact their control over finances. Therefore, it is assumed that women who have increased lands and other assets may have increased their control over finances. Increased self-confidence is highly relevant here as confident women are more likely to have control the resources. *Area of the respondents*, close-ended, nominal (Weber & Ahmad, 2014) is used in all models to see whether empowerment varies location wise.

Other variables related to women's demographic characteristics- *age*, close-ended with five multiple options (Garikipati et al., 2017; Mazumder & Lu, 2015; Mahmud et al., 2012; Swain & Wallentin, 2009; Hashemi et al., 1996); *education*, close-ended with four multiple options (Garikipati et al., 2017; Mazumder & Lu, 2015; Chemin, 2008; Mahmud, 2003). Age and education may impact women's ability to produce income and savings or persuade their husbands to give a part of her income. Thus, they might increase savings by keeping a fraction of income. Similarly, more educated women may have persuasion skills to control more resources of the households and participate in household decisions. One variable is related to husband's characteristics- his *education* used in the first and second empirical model following a study by Kishor and Subaiya (2008). Husband's education level may influence the household income and savings of women by recognizing the importance for the betterment of the

household considering the future expenses such as children's education and treatment. It is assumed that more educated husband is, more likely to increase household income and women's savings. Other variables are of household-level characteristics. *Savings before joining MFIs*, dichotomous (Chemin, 2008; Gaiha & Nandhi, 2008) is also used in the second empirical model. It is assumed that women who have the habit of savings beforehand, they are more likely to increase their savings afterwards.

Another significant variable, *Income-generating activities* (Weber & Ahmad, 2014) is used in the form of utilisation of loan. If women used loan for her own business, then she is considered as an entrepreneur. If other male members used this for their business, they are considered as entrepreneurs. If loan is used for other purposes rather than income-generating activities, then, nobody is considered entrepreneur. Thus, it is close-ended with three options. *Invest type* is used in the second model which is categorical with five options. It assumes that impact may vary depending on the investment of the loan.

5.4 Research findings

5.4.1 Descriptive results

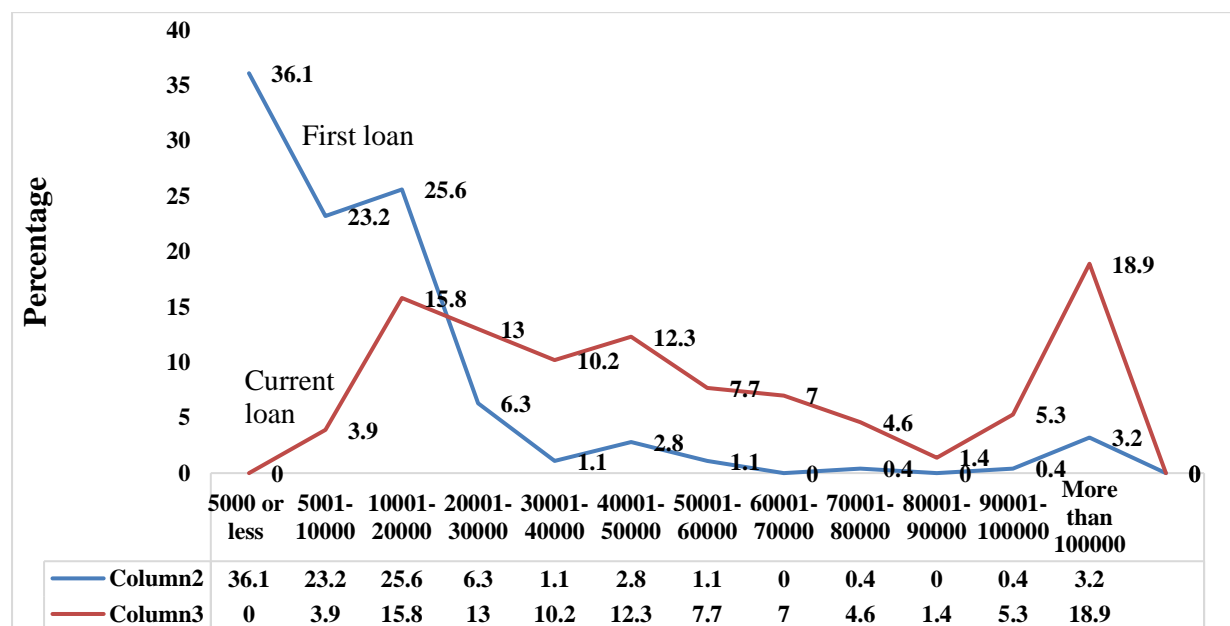
5.4.1.1 Demographic of the respondents

Descriptive statistics are 'the basis of all quantitative reasoning and it is absolutely necessary to be reported in research studies' (Larson-Hall & Plonsky, 2015). The clients of GB and BRAC, two renowned MFIs based in Bangladesh are the respondents of this study. Questionnaires were distributed to 316 respondents where 31 questionnaires were rejected because of incomplete answers which represents 90% of the response rate with 285 questionnaires. The demographic data includes age, women client's education, husband's education and household size.

As far as age is concerned, 58.9% belong to the age group of 18-39. The respondents aged 40-49 years comprises 23.5% and 50-59 years is accountable for 16.1%. Only 1.4% of the

respondents were aged 60 or above. Regarding the educational qualifications of the women, education level ranges from ‘No education’ to ‘College/others’. 34% respondents reported that they have no education where 31.2% and 31.2% went to primary school and high school respectively. Only 3.5% respondents have college/others education. The statistics are quite similar in terms of education of the husbands of the respondents. 29.8% of the respondents reported that their husbands have no education while 34.6% and 28.7% are found to have primary and high school education respectively. Only 7% respondents have college/others education. Regarding the household size, around 70.9% of the respondents have 4 to 6 family members where 21.8% have 7 or above (Appendix 5).

Figure 5. 2 Amount of first and current loan.

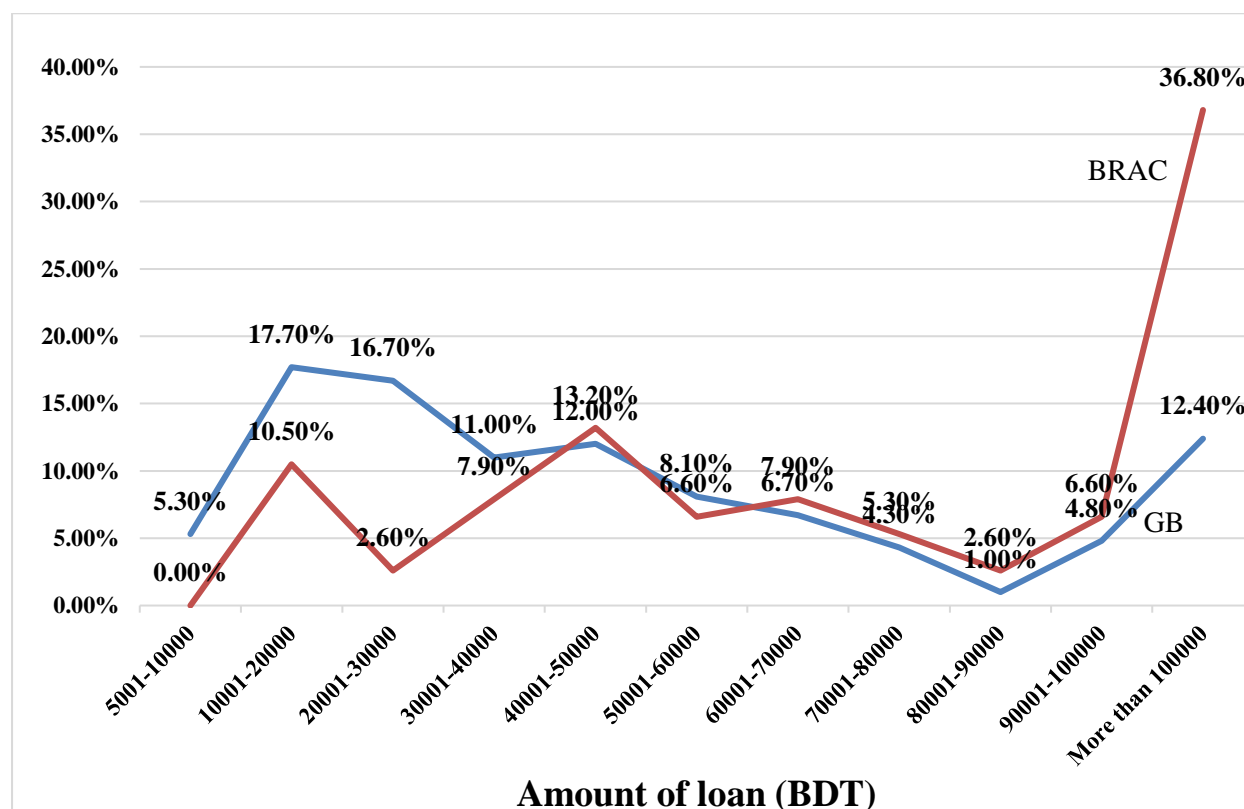


5.4.1.2 Organisational characteristics of the respondents

Figure 5.2 shows the amount of first and current loan received by the respondents. Regarding the amount of the loan as first microfinance loan, majority respondents (36.1%) received 5000 or less (BDT) as first loan while none of the respondents received this amount in terms of current loan. It shows that the lesser the amount of loan, higher the percentage of respondents in terms of first loan. On the other hand, percentage of respondents increased when the amount

of loan increased in terms of current loan, but not for all categories. The most striking difference observed in the category 'more than 100000 (BDT)' as 18.2% respondents are reported to be in this category while it was only 3.2% in terms of first loan. However, majority respondents, 51.3% are reported to be in between 10000 and 50000 (BDT) in terms of the first loan. For the remaining categories, the trend was upward compared to the first microfinance loan with small shift.

Figure 5. 3 Current amount of loan of GB and BRAC.



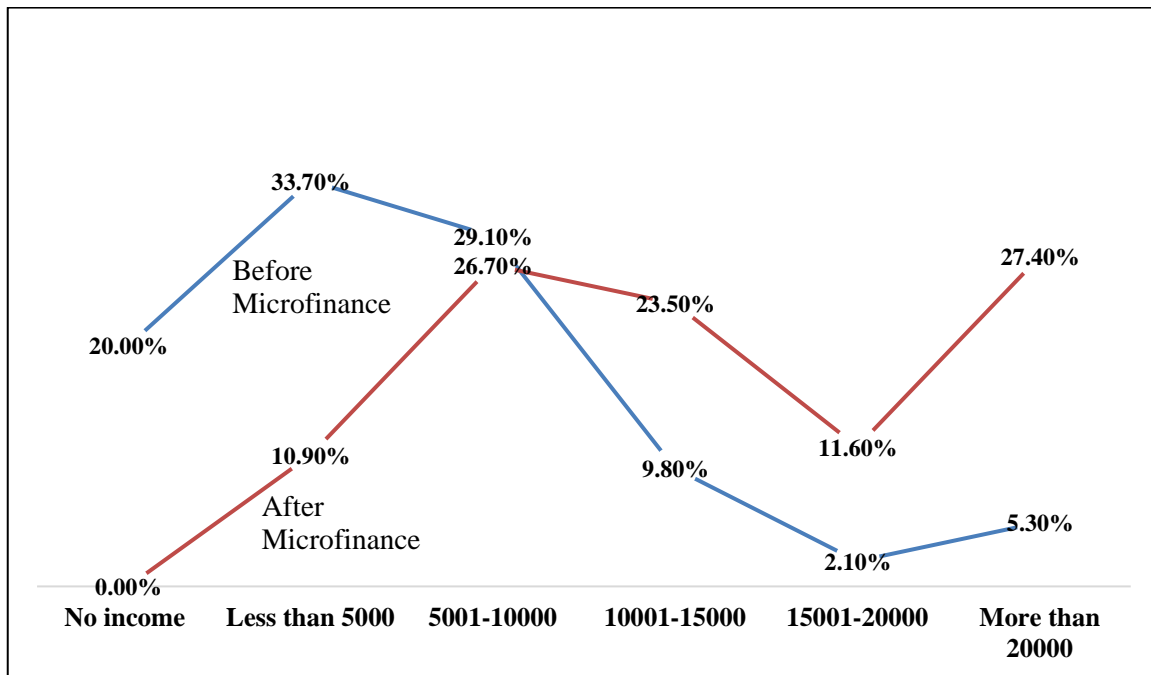
Regarding the loan amount, BRAC is found in providing relatively larger amount of loan than GB. To illustrate, 36.8% of the clients of BRAC have received the loan amount of more than 100000 while only 12.4% clients of GB received this amount (Figure 5.3).

In terms of area, it is found that more respondents, 29.0% from urban areas went for the highest amount of loan while it is 15.3% and 16.7% for rural and semi-urban areas respectively (Figure 5.5). Nevertheless, more respondents from rural areas are found to be in relatively higher categories, 50000 to 90000 (BDT) where it is 25.7%, 19.5% and 16.2% from rural, semi-urban

and urban areas respectively. In terms of lower categories of loan, 5001 to 40000 (BDT), rural and semi-urban are homogenous with respect to the respondents as 48.3% for rural and 43.5% for semi-urban. On contrary, only 33.9% respondents went for these categories in urban areas. Overall, it means MFIs have recently started offering larger amount of loan (Appendix 6).

As far as length of membership is concerned, it is found that 67.7% respondents have more than 5 years of memberships where 73.2% from GB and 26.8% from BRAC respectively (Appendix 7). 25.9%, 52.3% and 21.8% respondents with more than 5 years of membership are from rural, semi-urban and urban area respectively. In this study, 35.8% of respondents were found who are engaged with different types of entrepreneurial activities including shop keeping, trading, agriculture, livestock, poultry and fisheries as well as clothing and sewing. Very few respondents also involved with beauty parlour as well as lending money to other people on interest and invest on other people's business. 40.4% respondents handed over the loan to male members for their business activities and 23.9% did not invest on any productive activities. 36.8% respondents from GB and 32.9% respondents from BRAC are found in engaging in income-generating activities where 40%, 39.9% and 21% are from rural, semi-urban and urban area respectively (Appendix 7).

Figure 5. 4 Differences in women's household income before and after joining MFIs.



In relation to the household income, 20% of the respondents had no household income where 33.7% respondents had the income of 'Less than 5000' before joining microfinance while none of the respondents are found in 'no income' category after joining MFIs. 10.9% mentioned that their household income is still 'Less than 5000'. 29.1% mentioned their household income is in '5001-10000' and 9.8% was found to be in the range of '10001-15000'. This category '5001-10000' of income is found homogenous before (29.1% respondents) and after (26.7% respondents) while more than double (23.5%) are appeared to move to '15001-20000' after joining MFIs from 9.8%. Respondents are also appeared to improve their household income significantly as 11.6% respondents are in '15001-20000' from only 2.1% while a big move was noticed for the next category 'More than 20000' where it was 27.5% after joining MFIs from 5.3%. It shows households of the respondents have managed to improve the income after receiving the loan. Significant shift is visible from the low-income category to high income category (Figure: 5.6). 72.2% respondents from GB and 78.9% respondents from BRAC have increased household income where 71.8%, 79% and 66.1% from rural, semi-urban and urban area respectively (Table 5.1).

Table 5. 1 Descriptive findings

Items	Percentage	Items	Percentage
Increase in household income (MFIs)		Increase in household income (Area)	
GB	72.20%	Rural	71.80%
BRAC	78.90%	Semi-urban	79.00%
Total	76.00%	Urban	66.10%
Increase in savings (MFIs)		Increase in savings (Area)	
GB	51.20%	Rural	45.90%
BRAC	64.50%	Semi-urban	58.70%
Total	54.70%	Urban	58.10%
Repayment behaviours		The highest amount of loan (Area)	
No difficulties	35.10%	Rural	15.30%
Prefer monthly instalment	34%	Semi-urban	16.70%
Prefer weekly instalment	18.20%	Urban	29.00%
Difficulties in both ways	12.60%		
Interest rate (MFIs)			
GB	10%		
BRAC	15%		

As far as savings is concerned, 54.7% respondents have mentioned that their savings have increased after joining the MFIs. Among them, 51.2% of the respondents of GB and 64.5% of BRAC have increased their savings after joining MFIs (Table 5.1).

However, opening a savings account with MFIs is mandatory prior to receiving a certain amount of loan which may motivate the respondents to save a minimum amount weekly or monthly. Respondents will be denied in case of rejecting the savings account. Therefore, most of the respondents are found to have increase their savings starting from 50 (BDT) 0.60 (US\$ approximately). It is found that 54.7% of the respondents have 500 (BDT) or more

monthly savings when savings is accumulated from general and fixed savings account. GPS from GB and DPS from BRAC are considered as fixed savings account in this study. It is found that 45.1% of respondents have at least savings of 500 (BDT) in their fixed savings account. However, in terms of increase in women's savings, lesser respondents, 45.9% from rural areas are appeared to have increase in their savings while it is 58.7% and 58.1% for semi-urban and urban area respectively (Table 5.1).

With respect to lending methods of MFIs, it is found that neither GB nor BRAC used group-lending methodology as all the respondents received individual loan. Clients of GB paid 10% of interest for the current amount of loan while it was 15% for BRAC. In terms of repayment of the loan, only 4.6% of the respondents defaulted a loan during their membership period. With regards to repayment, 35.1% respondents mentioned no difficulties in paying the instalment, 34% respondents preferred monthly instalment to weekly where 18.2% prefer weekly instalment to monthly. 12.6% of the respondents have difficulties in both methods (Table 5.1).

5.4.1.3 Increase in resources, self-confidence and human capital

Table 5.12 (Appendix 10) shows that majority respondents could not purchase any land after joining MFIs. For instance, 80.5% of the respondents either strongly disagreed or disagreed in this case. While 42.6% respondents either strongly agreed or agreed in terms of increasing non-land assets such as furniture, vehicles, gold etc. In terms of house improvement or constructing new one, 57.6% respondents are found to either strongly disagree or disagree. Only 33% respondents are found to either strongly agree or agree in increasing their poultry and livestock while another 20.7% were neutral. Overwhelming respondents are found to either strongly agree or agree in terms of increasing self-confidence (95.4%), communication skills (95.4%) and literacy skills (88.5%).

5.4.1.4 Women's control over finances

Table 5.13 (Appendix 11) portrays the opinion of the respondents in control over finances after joining the MFIs. Economic factors include having daily spending money, having emergency money for use, spending ability of women, purchasing daily food items, purchasing ice-creams and sweets for their children. Shockingly, 51.6% of the respondents strongly disagreed and 8.4% disagreed with the statement that they have certain amount of money to spend for their personal purposes. On contrary, only 18.2% and 21.4% respondents agreed and strongly agreed in this indicator. Women entrepreneurs and those who work outside are expected to have their own income. In relation to have money for emergency use, 48.1% of the respondents are reported to strongly disagree. On contrary, 22.5% and 21.8% respondents are appeared to strongly agree and agree respectively. With regards to women's spending ability without anyone's permission, it turns out that 12.6% respondents are not allowed to spend as they want as they strongly disagreed while another 36.1% disagreed in this indicator. Nevertheless, 22.5% and 21.8% of the respondents strongly agreed and agreed respectively. Amusingly, majority respondents enjoy fundamental power in purchasing daily food items where 56.5% and 28.8% agreed and strongly agreed. Also, women can afford to purchase ice-cream or sweets for their children after joining MFIs as 47.7% and 11.6% answered as agree and strongly agree.

This table also represents the responses on women's control over other finances include keeping money from own wage earnings, keeping money from husband or children's wage earning, buying clothes for children and for herself, control over loan use and saving money individually. With respect to keeping her own wages, 24.2% and 10.9% women strongly agreed and agreed respectively where 22.8% and 14.4% agreed and strongly agreed respectively. With regards to keeping husband and children's wage earning, similar picture has turned out as 20.7% and 26.7% respondents strongly disagreed and disagreed respectively while 26% and 12.6% agreed and strongly agreed respectively. In terms of buying clothes for children and

herself, women's responses followed pretty much same track as they responded homogenously. 10.2% and 32.3% respondents strongly agreed and agreed respectively in terms of purchasing clothes for their children while 8.8% and 31.2% respondents strongly agreed and agreed respectively in purchasing their own clothes. Inversely, 37.5% and 10.2% women are found to disagree and strongly disagree for children's clothes while it is 40% and 10.5% for women's clothes. With regards to having control over loan use, more than half of the respondents said they can decide where and how to use the loan. 32.3% and 23.2% respondents agreed and strongly agreed in this regard while 33.9% and 11.0% disagreed and strongly disagreed. In terms of saving money in their savings account, majority respondents are found to have increased capabilities in saving money as 53% of the respondents agreed while 28.4% of the respondents strongly agreed.

5.4.2 Chi-square test

5.4.2.1 Chi-square test on household income and women's savings, amount of loan and area

In this study, variables such as household income, women's savings, the amount of loan and the areas of respondents have two or more categories which met chi-square test assumptions, also all expected counts are greater than 1 and expected counts are not less than 5. In terms of household income and the amount of loan, only 8.3% have expected count less than 5. Regarding women's savings and the amount of loan, none of the cells has expected count less than 5. Therefore, Chi-square test was conducted between the amount of loan and increase in household income and women's savings to see whether there is a relationship. Results of chi-square represent no relationship between the amount of loan and increase in household income (table 5.1). On the other hand, it shows a strong evidence of relationship between the amount of loan and increase in women's savings as it is found significant at 1%. Chi-square test also

shows that there is no relationship between the areas of respondents and increase in household income and women's savings (table 5.2).

Table 5. 2 Increase in household income and savings and the amount of loan

Indicators	Pearson's Chi-square test
Increase in household income	$\chi^2 (5, n= 285) = 7.12$ $p= .212$
Increase in women's savings	$\chi^2 (5, n= 285) = 50.61$ $p= .001$

Table 5. 3 Increase in household income and savings and the areas of the respondents

Indicators	Pearson's Chi-square test
Increase in household income	$\chi^2 (2, n= 285) = 4.0$ $p= .135$
Increase in women's savings	$\chi^2 (2, n= 285) = 3.8$ $p= .147$

5.4.2.2 Likelihood ratio chi-square test on increase in women's control over finances

There is a relationship found between the indicators of women's control over finances and the amount of loan. Nevertheless, only two of the indicators are found significant while nine are insignificant. Women have control over loan use and women can save money in their accounts are statistically significant at 1%, it means there is a strong relationship between the amount of loan and have a control over loan and saving money (Appendix 12). Regarding the relationship between women's control over finances and the area of the respondents, likelihood ratio chi-square test shows most of the indicators are significant. P value (table 5.15) indicates that there is a very strong relationship between control over finances and the areas of the respondents. Purchasing daily food preparation items, purchasing ice-cream or sweets for the children, keeping her own wage earnings, keeping husband's or children's wage earning, buying clothes for children, buying clothes for herself and saving money in accounts are found statistically significant (Appendix 13).

5.4.3 Kruskal-Wallis test

5.4.3.1 Kruskal-Wallis test on women's control over finances and the amount of loan

Kruskal-Wallis test is conducted to find out the difference in women's control over finances as respondents received different amounts of loan. This test aims to see whether there is statistically significant difference between the categories of loan amount. It turns out that indicators of control over finances such as women's control over loan use and saving money are statistically significant. It means there is statistically significant difference in women's control over loan use and saving money between the categories of the loan of amount received by respondents (Appendix 14).

Post hoc test is conducted to show the pairwise comparison of loan amount categories. For control over loan use, 10001-20000 (BDT) is significantly different from all categories except 20001-40000 (BDT) while 20001-40000 (BDT) is different from 40001-60000 (BDT) and More than 100000 BDT) while remaining categories are not. 40001-60000 (BDT) is different from 10001-20000 and 20001-40000 (BDT). 60001-80000 and 80001-100000 (BDT) are different from other categories except 10001-20000 (BDT). Lastly, more than 100000 (BDT) is found different from 10001-20000 and 20001-40000 (BDT). In terms of saving money in their account, loan amount 10001-20000 (BDT) is found significantly different from all categories except 80001-100000 (BDT). Other categories are appeared significantly different from 10001-20000 (BDT) but not from others. 80001-100000 (BDT) is indifferent to all categories.

5.4.3.2 Kruskal-Wallis test on women's control over finances and the area of the respondents

Kruskal-Wallis test is also conducted to find out the difference in women's control over finance on the areas of respondents. It turns out that indicators of control over finances such as purchasing ice-cream and sweet for the children, purchasing clothes for their children, saving

money in their account and buying clothes for herself are found significant. First three indicators are significant at 1% and last one is at 5%. It means there is a relationship in these variables between the categories of the areas of the respondents (Appendix 15). Post hoc test is also conducted to test pairwise comparison between the areas of respondents. For the indicators, such as purchasing ice-cream or sweets for the children, buying clothes for children and buying clothes for herself, rural to semi-urban area is found statistically significant (.001), (.002) and (.027) respectively. For saving money in their account, both rural to semi-urban (.003) and rural to urban (.001) are found statistically significant.

5.4.4 Empirical results

Model 1: Increase in household income

To refer the predictive accuracy of this model, it shows Model 1 correctly predicted 21.6% of cases where there is no increase in household income and 95.3% of cases where there is an increase in household income, giving an overall percentage of correct prediction rate of 76.1%. The model can explain 25.9% of variability for increase in household income. In this model, nine independent variables are deployed to predict the relationships with dependent variable. This model shows that there is a relationship between the amount of loan (LOANAMNT) and household income (INHOUINCOME). However, it is not overall significant. Loan category 20001-40000 (BDT) is significant at 5% ($p=.036$) and coefficient is negative. Odds ratio indicates that women who have received this amount of loan have 67.2% ($1 - .328$) lower chance to have increase in household income compared to the highest loan category. INCGENACT is overall significant that indicates that there is a relationship between this variable and increase in household income. Odds ratio for women engaged in income-generating activities indicates that women are 2.14 times ($e^{.759} = 2.136$) more likely to get increase in household income than when nobody is engaged in income-generating activities. Coefficient is also positive when loan is used by men. Odds ratio indicates that

Table 5. 4 Increase in household income

Variable	B	Std. Error	Wald	Df	Sig.p	Exp (B)	95% Confidence Interval	
							Lower Bound	Upper Bound
LOANAMNT (BDT)	-.962	.550	3.054	1	.081	.382	.130	1.124
10001-20000								
20001-40000								
40001-60000	-1.116*	.534	4.377	1	.036	.328	.115	.932
60001-80000								
80001-100000								
100001-120000 (Ref)								
	-.214	.543	.155	1	.694	.807	.278	2.341
	-.634	.618	1.054	1	.305	.530	.158	1.780
	-.957	.662	2.088	1	.148	.384	.105	1.406
AREA	.609	.414	2.161	1	.142	1.839	.816	4.142
Rural								
Semi-urban								
Urban (Ref)	.707	.385	3.378	1	.066	2.028	.954	4.309
INCGENACT	.759*	.387	3.852	1	.050	2.136	1.001	4.560
Woman								
Men								
Nobody (Ref)	1.065**	.391	7.436	1	.006	2.902	1.349	6.240
LNGTHMBSHP	-.212	.398	.284	1	.594	.809	.370	1.766
1-3								
4-5								
Above 5 (Ref)	-1.228**	.431	8.109	1	.004	.293	.126	.682
MFIMBSHP	-.100	.384	.068	1	.795	.905	.426	1.922
GB								
BRAC(Ref)								

AGE	.193	.435	.197	1	.657	1.213	.517	2.847
18-39								
40-49								
50 or more (Ref)	.479	.495	.936	1	.333	1.615	.612	4.260
EDUCN	-.723	.455	2.528	1	.112	.485	.199	1.183
No education								
Primary School								
High School or above (Ref)	.273	.414	.435	1	.510	1.314	.584	2.958
HUSEDUCN	.868	.450	3.715	1	.054	2.381	.985	5.753
No education								
Primary School								
High School or above (Ref)	.024	.369	.004	1	.949	1.024	.497	2.109
HSIZE(Continuous)	.139	.091	2.303	1	.129	1.149	.960	1.374

Notes: Ref stands for reference group.

LOANAMNT-Amount of loan, *AREA* -Area of the respondents, *INCGENACT*- Income-generating activities, *LNGTHMRSH*- Length of membership, *MFIBRSHP*- MFI membership, *AGE*- Age of the respondents, *EDUCN*- Education level of the respondents, *HUSEDUCN*- Husband's education level and *HSIZE*- Number of household members.

men who engaged in income-generating activities are 2.90 times ($e^{1.065} = 2.902$) more likely to get increase in household income compared to nobody is engaged in income-generating activities. *LNGTHMRSH* is also found significant ($p=.004$) with negative coefficient. Odds ratio indicates that women who are with MFIs for 4-5 years of membership have around 71% ($1-e^{-1.228}$) lower chance to get increase in household income than women with more than 5 years of membership with MFIs. Remaining predictors are found insignificant while *HUSEDUCN* (Husband's education) is nearly significant.

Model 2: Increase in women's savings

Model 2 correctly predicted 65.1% of cases where there is no increase in women's savings and 81.4% of cases where there is an increase in women's savings, provides an overall percentage

correct prediction rate of 74%. This model can explain 32.6% of variance of increase in women's savings. This model shows that LOANAMNT, INHOUINCOME, INVESTTYPE and HUSEDUCN are significant predictors of increase in women's savings.

LOANAMNT is found overall statistically significant. The loan size of 10001-20000 (BDT) ($p = .001$) and 20001-40000 (BDT) ($p = .006$) are significant where the relationship is negative. Odds ratio indicates that women who received the lowest amount of loan have 88% ($1 - e^{-2.107}$) lower probability to increase their savings compared to those women who received the highest amount of loan. Similarly, who received the second lowest amount of loan have 73.5% ($1 - e^{-1.327}$) lesser chance to increase their savings compared to those who received the highest amount of loan. INHOUINCOME also significantly predicted increase in women's savings (INWOMSAVINGS) and coefficient is negative. Odds ratio indicates that women with not increased household income have 56% ($1 - e^{-.822}$) lower chance to get increase in their savings than women with increased household income after joining MFIs. In other words, women with increased household income are 2.27 times ($1 / e^{-.822}$) more likely to have increase in savings than women with not increased household income. INVESTTYPE (Types of investment) also significantly predicted woman's savings as one of its categories is found significant ($p = .048$). Women who invested the loan in vehicles/abroad are 3.91 ($e^{1.365}$) times more likely to increase their savings compared to when loan is not invested in any business. HUSEDUCN (Husbands' education level) is also found significant with negative coefficient. Odds ratio indicates that women have 57% ($1 - e^{-.837}$) lower chance to increase their savings when their husbands have primary school qualification compared to those women whose husbands' have high school or above qualification.

Table 5. 5 Increase in women's savings

Variable	B	Std. Error	Wald	Df	Sig.p	Exp (B)	95% Confidence Interval	
							Lower Bound	Upper Bound
LOANAMNT (BDT)	-2.107**	.508	17.240	1	.000	.122	.045	.329
10001-20000								
20001-40000	-1.327**	.482	7.569	1	.006	.265	.103	.683
40001-60000								
60001-80000								
80001-100000	.214	.473	.205	1	.651	1.239	.490	3.130
100001-120000 (Ref)								
	.136	.541	.063	1	.802	1.145	.396	3.308
	.285	.677	.177	1	.674	1.329	.353	5.009
AREA	-.250	.420	.353	1	.552	.779	.342	1.775
Rural								
Semi-urban	.348	.380	.838	1	.360	1.416	.673	2.982
Urban (Ref)								
Yes (Ref)								
INCGENACT	-.186	.595	.097	1	.755	.830	.259	2.667
Woman								
Men	-.858	.573	2.240	1	.135	.424	.138	1.304
Nobody (Ref)								
INHOUIINCOME	-.822*	.340	5.849	1	.016	.439	.226	.856
No								
Yes (Ref)								
SAVNGSBEF	-.320	.395	.657	1	.418	.726	.334	1.575
No								
Yes (Ref)								
INVESTTYPE	.260	.656	.157	1	.692	1.297	.359	4.691
Shop/clothing								
Vehicle/abroad	1.365*	.689	3.918	1	.048	3.914	1.013	15.120
Trading								
Agri/livestock	.286	.581	.242	1	.623	1.331	.426	4.156
No business (Ref)								
	.083	.659	.016	1	.899	1.087	.299	3.955
LNGTHMBSHP	-.072	.396	.033	1	.855	.930	.428	2.021
1-3								

4-5 Above 5 (Ref)	-.549	.457	1.449	1	.229	.577	.236	1.412
MFIMBRSH	.037	.350	.011	1	.915	1.038	.523	2.060
GB BRAC (Ref)								
AGE	.445	.438	1.032	1	.310	1.561	.661	3.686
18-39								
40-49	.329	.456	.522	1	.470	1.390	.569	3.398
50 o more (Ref)								
EDUCN	-.040	.438	.008	1	.928	.961	.407	2.268
No education								
Primary School	.298	.391	.580	1	.446	1.347	.626	2.897
High School (Ref)								
HUSEDUCN	-.464	.422	1.207	1	.272	.629	.275	1.438
No education								
Primary School	-.837*	.365	5.266	1	.022	.433	.212	.885
High School (Ref)								
HSIZE (Continuous)	.062	.082	.576	1	.448	1.064	.906	1.249

Notes: *Ref* stands for reference group

LOANAMNT- Amount of loan, *AREA*- Area of the respondents, *INCGENACT*- Income-generating activities, *INHOUINCOME*- Increase in household income, *SAVINGBEF*- Savings before joining MFIs, *INVESTTYPE*- Investment type, *LNGTHMRSH*- Length of membership, *MFIBRSHP*- MFI membership, *AGE*- Age of the respondents, *EDUCN*- Education level of the respondents, *HUSEDUCN*- Husband's education level and *HSIZE*- Number of household members.

Model 3: Increase in women's control over finances

Model 3 assesses the impact on women's control over finances when they are given access to credit from MFIs. In terms of model fitting, the model of this study is significant at 1% which means that null hypothesis can be rejected that the model without predictors is as good as model with the predictors. The test of parallel lines meets the assumptions as it appears insignificant. With regards to goodness of fit, deviance is found insignificant while Pearson is significant.

Table 5. 6 Increase in women's control over finances

Variable	Categories	B	Std. Error	Wald	Df	Sig.p	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold INCNTRLFINCS	Disagree	-2.007	.628	10.195	1	.001	-3.239	-.775
	Neutral	.352	.615	.328	1	.567	-.853	1.557
	Agree	-	-	-	-	-	-	-
Location LOANAMNT (BDT)	10001-20000	-.453	.439	1.065	1	.302	-1.315	.408
	20001-40000	.345	.418	.679	1	.410	-.475	1.165
	40001-60000	-.839*	.404	4.318	1	.038	-1.631	-.048
	60001-80000	.042	.458	.008	1	.928	-.855	.938
	80001-100000	-.682	.565	1.458	1	.227	-1.789	.425
	100001-120000	0 ^a	.	.	0	.	.	.
AREA	Rural	-.371	.350	1.126	1	.289	-1.056	.314
	Semi-urban	.240	.323	.551	1	.458	-.394	.874
	Urban	0 ^a	.	.	0	.	.	.
INCGENACT	Women	1.138**	.338	11.325	1	.001	.475	1.802
	Men	-.210	.323	.424	1	.515	-.843	.423
	Nobody	0 ^a	.	.	0	.	.	.
INHOUIINCOME	No	-.713*	.290	6.069	1	.014	-1.281	-.146
	Yes	0 ^a	.	.	0	.	.	.
INWOMSAVING S	No	-1.587**	.284	31.286	1	.000	-2.143	-1.031
	Yes	0 ^a	.	.	0	.	.	.
INLAND	Disagree	-.308	.349	.779	1	.377	-.992	.376
	Neutral	.451	.762	.351	1	.553	-1.041	1.944
	Agree	0 ^a	.	.	0	.	.	.
INOTHASSETS	Disagree	-.240	.255	.881	1	.348	-.740	.261
	Neutral	.154	.710	.047	1	.829	-1.238	1.545
	Agree	0 ^a	.	.	0	.	.	.

INSELFCONFDNC	Disagree	-.983	.615	2.555	1	.110	-2.188	.222
	Neutral	-.759	1.963	.149	1	.699	-4.607	3.090
	Agree	0 ^a	.	.	0	.	.	.
LNGTHMRSHP	1-3 years	.025	.324	.006	1	.939	-.609	.659
	4-5 years	.359	.386	.867	1	.352	-.397	1.115
	Above 5 years	0 ^a	.	.	0	.	.	.
MFIMRSHP	GB	.104	.297	.122	1	.727	-.479	.687
	BRAC	0 ^a	.	.	0	.	.	.
AGE	18-40	.685	.356	3.692	1	.055	-.014	1.383
	40 -49	.847*	.393	4.636	1	.031	.076	1.618
	50 or more	0 ^a	.	.	0	.	.	.
EDUCN	No education	-.228	.333	.466	1	.495	-.881	.426
	Primary School	-.446	.311	2.057	1	.152	-1.057	.164
	High school or above	0 ^a	.	.	0	.	.	.

Number of observations= 285, $R^2 = .297$ (Cox & Snell), $.336$ (Nagelkerke), Parallel line assumption is met, Model $\chi^2 (24) = 35.24$, $P = < .000$; * $p < .05$, ** $p < .01$

Note: LOANAMNT- Amount of loan, AREA- Area of the respondents, INCGENACT- Income-generating activities, INHOUINCOME- Increase in household income, INWOMSAVINGS- Increase in women's savings, INLAND- Increase in land, INOTHASSETS- Increase in other assets, INSELFCONFDNC- Increase in self-confidence, LNGTHMRSHP- Length of membership, MFIMRSHP- MFI membership, AGE- Age of the respondents and EDUCN- Education level of the respondents

As the 'significance' results are different for Pearson and Deviance, the over-dispersion is checked by dividing the value of Chi-square of Pearson by its degree of freedom. Over dispersion is possible when the deviance at least twice the degrees of freedom (Lindsey, 1999). It is found that there is no problem of over-dispersion as deviance is 1.13, which is nowhere near to two.

LOANAMNT, INHOUINCOME, INWOMSAVINGS and AGE are found statistically significant. Loan category 40001-60000 (BDT) is found significant at 5% ($p = .038$). Negative coefficient shows the negative relationship. Odds ratio indicates that women who received

40001-60000 (BDT) have 57% ($1-e^{-.839}$) lower chance to agree in increasing control over finances (INCTRLFINCS) compared to those who received the highest amount of loan. INCGENACT has also significantly ($p=.001$) predicted INCTRLFINCS which indicates very strong relationship. Positive coefficient shows positive relationship. Odds ratio shows that when women are engaged with income generating activities are 3.11 times ($e^{1.138}$) more likely to agree in increasing control over finances compared to nobody is engaged in generating activities. INHOUINCOME is found as significant predictor of women's control over finances. Odds ratio indicates that women who had not increased household income have 51% ($1-e^{-.713}$) lower probability to agree in increasing their control over finances compared to women who have increased household income. Similarly, INWOMSAVINGS is also significantly ($p=.001$) predicted women's control over finances. Odds ratio indicates that women who had not increased savings after joining MFIs have 79.5% ($1-e^{-1.567}$) lower probability in increasing control over finances than women who had increase in savings after joining MFIs. AGE is also appeared significant ($p=.032$) with positive coefficient. Odds ratio indicates that women who fall in this age category (40-49) versus 50 or more, are 2.32 times ($e^{.847}$) more likely to agree in increasing their control over finances.

5.5 Discussion of the findings

This research aims to assess the impact on women clients after getting the access to certain amount of credit from MFIs given that these women had no access to conventional financial institutions because of lack of collateral and credit score. Impact was measured by women's household income, their own savings and control over finances after joining the MFIs. First hypothesis (H_1) of this research is that women increase their household income after getting the access to microfinance. Descriptive analysis supports the hypothesis as majority of the respondents are found to move from lower to higher categories when their household income was compared before and after joining the MFIs. This finding is coherent with reviewed

literature (*e.g.* Agbola et al., 2017) where they reported a modest surge in income however differs from the study of Angelucci et al., (2015) and Augsburg et al., (2015) as they reported no effects in household income. It is found that more respondents from BRAC have increased their household income compared to GB. It is also found that BRAC comparatively provides larger amount of loan than GB. However, from the primary analysis, it cannot be concluded that household income increased because of access to microfinance services as respondent's household income may increase by other external factors. For instance, there is a possibility to increase household income immediately if client's husband or her children are already engaged with any financial activities such as businesses, driving vehicles or working abroad. On the other hand, there is a possibility of not increasing household income immediately regardless of the amount of loan received if none of the family members is neither employed/self-employed nor use the loan for any business activities. Therefore, further analysis was conducted to investigate to find whether there is any relationship between the loan amount and household income. Chi-square test demonstrates no relationship between the household income and the amount of loan. However, findings of the empirical model (1) suggests that size of the loan is a significant factor to impact their household income as one of the categories of loan is found statistically significant. The findings indicate that lower amount of loan is not sufficient to increase income. This finding is supported by the reviewed literature (*e.g.* Adjei et al., 2009) as they report of statistical significance of the amount of loan. However, this result differs from other study (*e.g.* Dutta & Banerjee, 2018) as it informs the effectiveness of low frequency of smaller loans than more repeated loans to have higher per capita income. On contrary, Field et al., (2013) corroborates the finding of this study as they were sceptical about the size of the loan and report that small amount of loan does not confirm high-income path. Accordingly, it can be inferred that the larger the amount of loan, the higher the probability of increasing income. Considering the external factors to impact the household income, it is also investigated

with the household size, as number of members in the household may influence the household income, however, it appears that there is no relationship between the household size and income. Most of the households of microfinance clients have only one person who earns whether it is men or women. Also, some of them have more children than others that increases number of family members, but they do not work or have any scope to earn, thus cannot contribute financially.

Money is fungible, it has been found in using on non-income generating activities by the clients (Karlan & Zinman, 2011) such as daily consumption. Antagonistic consequences may stem through loan utilisation on daily consumption and smoothing income constraints what intensify the vulnerabilities of clients. In this case, they must reimburse the loan by doing waged labour (Bylander, 2015) as they remain liable for commitments through signing the contract made to MFIs. Certainly, household income may not be impacted from having access to credit if it is not used on any income-generating purpose. Therefore, household income is further checked with the ways of utilisation. The findings suggest that significant number of respondents have invested the loan on businesses, thus, they have increased their income-generation activities. Similar finding has been suggested by the reviewed literature (*e.g.* Attanasio et al., 2015) in Mongolian context where they report the rise of entrepreneurship, nevertheless, they have rejected the rise of profitable enterprises. Though business activities and self-employment increase through the entrepreneurship, it does not ensure convincing boost of income (Augsburg et al., 2015). Nevertheless, findings of this research demonstrate different result in this regard as it shows the probability of having increase in income when both women and men are engaged in income-generating activities, however, relationship is stronger for men. This finding is corroborated by the reviewed literature (*e.g.* Dutta & Banerjee, 2018) as they reported increase in household income because of more engagement with income-generation activities. Findings represent that investing money on entrepreneurial activities facilitate income

generation both for women and men, but there is more probability to have increased income for men. This result is in line with the findings of Todd (1995) as he suggested that men's enterprise seems to be more profitable than women. It also demonstrates that men are more efficient in increasing household income. It is quite rational in Bangladesh, as men are more engaged with markets and other financial activities which make them more experienced than women to conduct businesses successfully. Household income is also investigated with the areas of respondents, though lesser respondents are found to have increased income from urban areas compared to rural and semi-urban, the difference was minor. It is, also reflected by the empirical model which informs no relationship between the household income and the areas of the respondents. This result is coherent with the findings of Weber and Ahmad (2014) mentioned in the literature which also shows no relationship between the areas of respondents and the indicators of financial and social empowerment. Moreover, length of membership with MFIs is a significant factor to increase income as clients with long-term (more than 5 years) memberships are found more likely to increase their household income. It is not possible and expected that one or two term loan will immediately impact the empowerment positively. It follows a cycle or a process to begin its influence. This finding is supported by the studies (*e.g.* Dutta & Banerjee, 2018; Al-Mamun & Mazumder, 2015) as they report that mean household income of old respondents is higher than new respondents. Dutta and Banerjee (2018) indicated that clients with long-term membership were engaged with income-generating activities which is the reason to get surge in income. The result of this study is also in-line with the study of Weber and Ahmad (2014) where they inferred that empowerment increases with the number of loan cycles.

Savings is one of the significant indicators of economic achievement of MFIs' clients. Increase in savings is supposed to take place as an income augmentation effect. The second hypothesis (H₂) of this research is that women increase their savings after joining MFIs. Clients can only

think about savings after spending on their daily consumptions. On top of the consumption, they are required to repay the instalment of loan before starting to save in their accounts. Primary analysis shows that more than 90% of the respondents started to save after joining MFIs. More than 90% respondents are an outstanding proportion; however, it might happen because of mandatory savings policy of MFIs as GB and BRAC have compulsive savings policy before allowing the clients to apply for a loan. Therefore, this study further examines the savings from clients' fixed savings accounts (voluntary) to see whether savings behaviour is coherent when it is not compulsive. The findings show that around 55% of clients saved at least 500 (BDT) in their savings account per month. Ostensibly, it cannot be concluded with the impressive clients' savings increased because of access to finance. In this case, chi-square test was conducted that shows a relationship between increased savings and the amount of loan. The result of chi-square is also supported by the empirical model (2) of this research which suggests that clients with lower amount of loan have lower probability of having spare money to save in their accounts. It indicates that there is more probability to have increase in savings when there is a larger amount of loan received by the respondents. This finding is corroborated by other studies in the literature (*e.g.* Agbola et al., 2017; Adjei et al., 2009) as these studies recommend that availability of microfinance facilities encourages households to save. Also, respondents are bound to save certain percentage of their loan prior to receiving the amount. Mandatory savings policy of MFIs encourages the clients to increase their savings (Adjei et al., 2009). More specifically, they emphasised that savings increase when the amount of loan increases. The recent development of savings services of MFIs with multiple options such as voluntary to involuntary and short to long term savings have attracted the clients. Therefore, along with mandatory savings, women are found to save voluntarily as they are appeared to have fixed savings account with GB and BRAC where they receive a certain percentage of interest too. Thus, small amounts of savings together appear as a large amount of investment

at the end of the year for any entrepreneurial activities, for healthcare of the household members and education of the children. Most importantly, clients' savings seems to be a fundamental source of funds for MFIs to run their operations where MFIs gradually reduce their financial dependency as they achieve financial sufficiency. Consequently, this study suggests that women's economic growth takes place through the surge in their own savings as it facilitates to foster their financial condition and also provides the ability to make financial contribution to their households. The findings from the empirical model also depict that women with no increase in their household income have lesser probability to increase savings. It is anticipated that women will have spare amount of money to save when household income consistently increase.

Descriptive statistics show income-generation activities increase after joining MFIs, nevertheless, empirical model (2) represents that it does not necessarily translate to savings. This result is corroborated by the studies in the reviewed literature (*e.g.* Augsburg et al., 2017; Attanasio et al., 2015) as their study reports similarly. Their study suggests that savings of women did not increase despite of surge in business activities. Regarding this, Attanasio et al., (2015) notified a significant reason for not having any impact in savings. They mentioned that though there is rise in business enterprises but there is no evidence of profitable businesses. It could happen because of lack of experience in the business and lack of training as most of the microfinance clients are assumed to have no business knowledge and skills. With respect to this, Ashraf et al., (2009) reported that farmers have increased their income when they were provided financial resources, however, their income declined when they could not produce quality products to satisfy the exporters in European market.

Increase in savings has been also examined with the types of investment women made with the received amount as they have been using this loan for income generating as well as for consumption or other non-income generating activities such as invest in housing. This study

shows investment for vehicles and abroad facilitates women's savings. There is a significant number of populations drive vehicles such as rickshaw, auto-rickshaw and taxi to transport people. Another large group of population lives in abroad, specifically in the Middle East as waged labours. A group of clients use their loan to purchase vehicles for their husband/children or send them abroad as they are most secured and do not need any skills. Though this investment facilitates women to increase their savings, nevertheless, it does not ensure women's engagement with business activities. At the same time, it means that when loan is used in men's purpose, women might increase their savings. Husband's education also appeared as an important predictor to increase savings as findings show that a husband with primary school education versus high school or above is less likely to have increase in their savings. It indicates that husbands with more human capital may have more abilities to understand the importance of savings to use in future, thus, contribute to women's savings.

Third hypothesis (H_3) of this research is that women's control over finances increase after joining the MFIs. Preliminary findings suggest that the respondents have reasonably good grip on finances after joining the MFIs in some indicators such as whether she is able to purchase daily food preparation items, purchase sweets for the children and save money in their accounts. Overall, percentage of women in control over finances was moderate (31%) after joining the MFIs. This finding is in-line with the study of Hashemi et al., (1996) where they have reported results in terms of control over resources. They mentioned none of the respondents of BRAC had any control where around three fourth of the GB clients had control. Descriptive findings of this study in relation to control over finances is also supported by many other studies in the literature (*e.g.* Ganle et al., 2015; Goetz & Gupta, 1996; White, 1991) as they report no or moderate control over the indicators of resources.

Likelihood ratio chi-square test demonstrates that amount loan is strongly related with only two of the indicators, which are control over loan use and able to save in accounts. This result

also corroborated by the findings of the empirical model (3) which suggests that one of the categories of loan amount (40001-60000 BDT) impacts women's control over finances negatively. It demonstrates that women might need larger amount of loan than the above category to expand their control over finances. However, though officially loans are provided to women, it is mostly used by their husbands or other household members. The findings of primary analysis also show only 55.5% of women have control over loan use and remaining of the respondents did not have. In this regard, size of the loan might not appear as a major factor to achieve control over finances. Existing patriarchal and socio-cultural norms as well as lack of human capital of women confine women's ability to achieve a greater control over own or household income, savings and restricts her spending ability at the same time. Most importantly, women willingly hand over the loan to their husbands and children because of their previous non-engagement and non-experience with financial activities as they are usually confined to household's activities (Ganle et al., 2015; Todd, 1995). In this case, women's control over finances may depend on their husband's nature of dealing with household expenses. Some men hand over monthly household expenses to their wife in advance where she finds the authority to spend a certain amount according to her wish. Men with flipped characteristics will not hand over any expenses where women's position in controlling the finances do not change. It may not only push towards defaulting the loans, but also jeopardises their position to be eligible for future loan. This is supported by the findings of another study in the literature (*e.g.* Garikipati, 2008). Though MFIs show very high repayment rate, the question is how clients manage to repay in case of not being a controller of the loan after receiving it. With respect to this issue, women may end up becoming clients of multiple MFIs. Also, clients who are involved in wage labouring may divert their wages to instalment of loan. Nevertheless, the scenario can be different when women are engaged in income-generating activities. The findings suggest that women are more likely to have control over finances when

they are engaged in income-generating activities compared to those who are not engaged. This result contradicts to the study of Dutta and Banerjee (2018) mentioned in the literature review. They have reported that though respondents have increased their income because of business engagement, their intra-household bargaining power remained just on the papers. On the contrary, other study of Angelucci et al., (2015) informs completely different findings as they mentioned that clients have achieved intra-household decision making power despite no effects in household income.

Moreover, women who earn are usually more respected than non-earning women in the households; besides, they are more likely to be equipped with knowledge and skills because of their dealing with other people for the business purposes. This process creates confidence, thus, women may achieve more controlling power in spending whether it is for daily expenses, for children and herself, or saving money for future. It is also assumed that when women are not entrepreneurs, they may still have more control on the resources if household income increase after joining MFIs. Income is a significant predictor of economic empowerment (Ganle et al., 2015; Weber & Ahmad, 2014; Garikipati, 2008; Duflo, 2003) which holds potential and dynamic role towards economic empowerment. Likewise, empirical result of this study (1.3) also proves the relevancy of household income as it depicts that women who had not increased income after joining MFIs, they are more likely to disagree to increase their control over resources. It is anticipated that households with increased income either through her or other household members may provide women to have more control over finances than households with little income. Similarly, findings from empirical model also suggest that women with no increase in savings are more likely to disagree in increasing control over finances. Savings is a great source of confidence to provide power to future unexpected incidents. An economically active woman with her contribution to household income and own savings can register more control within the household. This results higher bargaining power that generates confidence

to challenge the prevailing norms which restrict her abilities (Ashraf et al., 2010; Swain & Wallentin, 2009). Women's age is also found as salient predictor to influence women's control over resources. Similar results also reported by other studies (Goldman & Little, 2015; Weber & Ahmad 2014). In this research, middle-aged women (40-49 years) are more likely to have control than old-aged women. It is obvious from the primary findings that older women (50 or above) are relatively behind than middle-aged women in terms of received loan size, increased household income and savings, however, women from middle aged category is far behind than younger women (18-39) on these regards. Therefore, other factors may influence women to have more control over the resources. In Bangladesh, traditionally women enjoy more power with the increase of their age within their household as their in-laws get older, thereby, decline in activities on all aspects of their life. Empowerment differs over the life span as the rights and duties of women change with age.

5.6 Conclusion

Women's economic disempowerment emanates from their non-engagement of economic activities due to lack of financial resources. The results of this study show that women have increased household income when they are given access to financial resources from MFIs. It also shows that women have significantly increased their savings. However, it cannot be ruled out that significant rise of savings because of the MFIs' compulsive savings policy. It also shows that significant number of women have engaged in income-generating activities; at the same time, significant number of women are found to hand over the loan to the male members of their household. This study reports that amount of loan impact women's household income, their savings and their control over finances; nonetheless, this study does not find any impact of women's area. To explain the results, it is argued that the availability of financial resources works as stimuli to engage in economic activities that leads to economic development. Thus, women find the ability to increase their economic empowerment.

This study investigates the impact of access to credit on three settings such as in rural, semi-urban and urban area to see whether there is any difference in different locations. To the researcher's knowledge, this study may be the first to consider this variable in Bangladeshi context across all dimensions. Weber and Ahmad (2014) used this variable in a Pakistani study, however, their study was limited to social and financial empowerment, it did not compare the income and savings in different settings. This study contributes with its findings too. Size of the loan is fundamental in increasing women's household income. Also, size of loan is critical to increase women's savings. Thus, this study informs that the larger amount of loan facilitates the financial health of clients of MFIs. It also informs that household income increases when women are engaged with income-generating activities. Overall, this study suggests that size of the loan, women's income generating activities, their income and savings are germane to women's economic empowerment.

In the next chapter, this research explores beyond the impact of microfinance on economic dimension.

Chapter 6

Microfinance and women empowerment in Bangladesh: Impact in social and political dimensions.

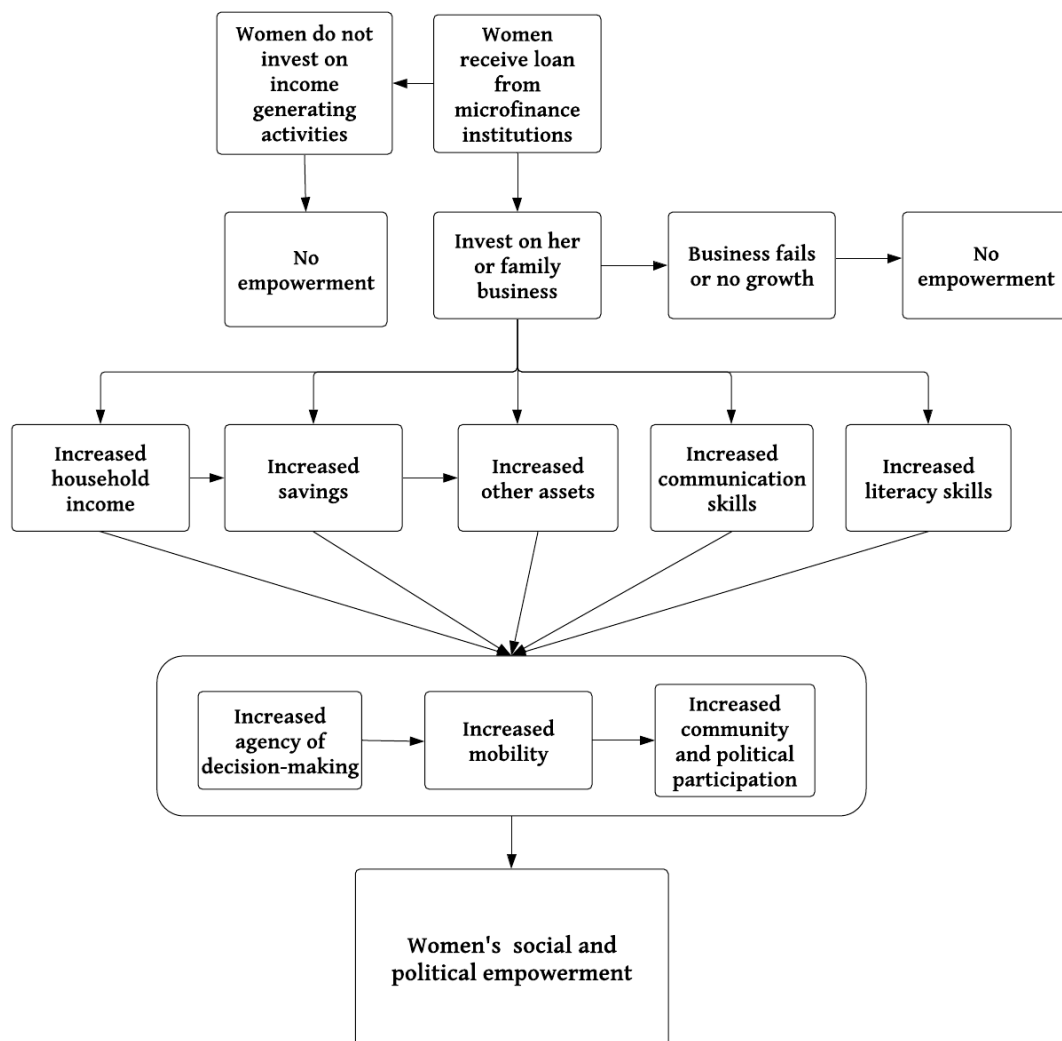
In this chapter, this research explores women's empowerment beyond economic aspects, specifically, impact of microfinance services on women's empowerment in social and political dimensions. Firstly, it represents the theoretical model and the conceptual framework of this study. Secondly, it shows the methodology of the study including measurement of variables. Thirdly, it shows the research findings and discussion. Lastly, it draws the conclusion.

6.1 Conceptual framework

Conceptual model of this study developed considering the empowerment framework of Kabeer (1999) and pathways matrix of Chen and Mahmud (1995). Kabeer argued that resources are not restricted to its conventional economic spectrum, it can take different forms. She emphasised the significance of human and social resources to amplify the capabilities of exercising choice. These resources can be achieved through the manifold social relationships which usually take place in various institutional domains, for instance, family, market and community that eventually formulate the society. Access to these resources reflect the rules and norms in the society which drive the interaction, distribution and exchange among the social actors. Thus, rules and norms provide certain actors authority over others to a certain extent to influence the principles of distribution and exchange. Chen and Mahmud's framework include material pathway matrix which incorporates measurable and non-measurable material, possession or ownership of which are required in determining women's empowerment. Cognitive pathway matrix represents changes in levels of knowledge, skills and awareness of wider environment. Relational pathway matrix shows the relationship between women and members within household as well as community. Perceptual pathway matrix represents women's own status within the household and community. In other words, this aspect of

empowerment seeks to shed light on women's perception of well-being and the changes that they have experience after joining the MFIs.

Figure 6. 1 Conceptual framework: Women empowerment through microfinance programmes



Conceptual framework of this study starts with the provision of financial services by MFI include credit and savings as business capital to a woman. Women are given loans to invest on their business or any other income-generating activities run by family members such as husband or children. Women use provided loan for starting a business or already established business; they may hand over the loan to their household members to conduct similar kind of

activities. Income-generating activities conducted by herself or family members will increase household income, their savings and other assets if business is successful.

This demonstrates that having access to financial services leads to women's or household's income generation which is related to women's economic empowerment. Secured access to finance boosts women's confidence because of financial security. Besides, they have the opportunities to form the human capital through outside exposure. Women's human capital immediately starts to take form during the process of receiving loan through the communication with microfinance officials assuming that they never have discussed with someone before at institution level. Also, they are required to write their name for the contract prior to receive the loans. Also, they are required to count the loan amount in front of the officials to ensure that they received the correct amount. Thus, learning how to write and count contributes to their literacy skills. Regular communication with credit officers or managers, at institution level gradually improves their communication skills. Communication, not only with the officials, but also with other members of MFIs during weekly or monthly meetings in the centre increase their contacts in the community, thus forms a network in the community that expands when more women joins microfinance programmes. This way, women's social capital takes form and they can apply it when necessary.

Having income and savings along with control of resources makes them economically empowered. With the abilities to generate income and savings, they have more chance to participate in household decisions. Increased decision-making ability in the household, increased mobility and networks within the community make them socially and politically empowered.

6.2 Methodology

6.2.1 Empirical models

Ordinal logistic regression is used for the first two models as dependent variables are ordinal.

First model tests the fourth hypothesis: women's agency in decision-making increase if they are given access to credit from MFIs. The model applied here can be described as follows:

Model 4: Increase in women's agency of decision-making

$Logit[P(\text{increase in agency of decision} - \text{making})] =$

$$\begin{aligned} & \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \beta_7 X_{7i} + \beta_8 X_{8i} + \beta_9 X_{9i} \\ & + \beta_{10} X_{10i} + \beta_{11} X_{11i} + \beta_{12} X_{12i} + \beta_{13} X_{13i} + \beta_{14} X_{14i} + \varepsilon_i \end{aligned} \quad (1.9)$$

Where $Logit[P]$ represents the probability of respondents having increased agency of decision-making. β_0 is the intercept. X_1 - X_{14} are the independent variables where X_1 is amount of loan, X_2 is the household income after joining MFIs, X_3 is area of the respondents, X_4 is engagement with income-generating activities, X_5 is increase in savings, X_6 is increase in land, X_7 is increase in other assets, X_8 is increase in poultry or livestock, X_9 is increase in communication skills, X_{10} is increase in literacy skills, X_{11} is length of membership, X_{12} is MFI membership, X_{13} is age of the respondents and X_{14} is education level of the respondents. This model is picked up considering the goodness of fit test that passed the assumption.

Model 5: Increase in women's mobility

This model tests the fifth hypothesis: women's mobility increases if they are given access to credit from MFIs. The model applied here can be described as follows:

$Logit[P(\text{increase in women's mobility})] =$

$$\begin{aligned} & \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \beta_7 X_{7i} + \beta_8 X_{8i} + \beta_9 X_{9i} \\ & + \beta_{10} X_{10i} + \beta_{11} X_{11i} + \beta_{12} X_{12i} + \beta_{13} X_{13i} + \beta_{14} X_{14i} + \beta_{15} X_{15i} + \varepsilon_i \end{aligned} \quad (1.10)$$

Where $Logit[P]$ represents the probability of respondents having increase in mobility after joining MFIs. β_0 is the intercept. X_1 - X_{15} are the independent variables where X_1 is amount of loan, X_2 is increase agency of decision-making, X_3 is engagement with income-generating activities, X_4 is area of the respondents, X_5 is increase in household income, X_6 is increase in savings, X_7 is increase in land, X_8 is increase in house, X_9 is increase in other assets, X_{10} is increase in communication skills, X_{11} is increase in literacy skills, X_{12} is length of membership, X_{13} is MFI membership, X_{14} is age of the respondents and X_{15} is education level of the respondents. This model is picked up considering the goodness of fit test that passed the assumption.

Model 6: Increase in women's community and political participation

For community participation and political participation, binary logistic regression is selected as dependent variable is in dichotomous data. This model tests the sixth hypothesis: women's community and political participation increase if they are given access to credit from MFIs.

The model applied here can be described as follows

$$\begin{aligned}
 &Logit[P(\text{increase in community and political participation})] = \\
 &\beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \beta_7 X_{7i} + \beta_8 X_{8i} + \beta_9 X_{9i} \\
 &+ \beta_{10} X_{10i} + \beta_{11} X_{11i} + \beta_{12} X_{12i} + \beta_{13} X_{13i} + \epsilon_i
 \end{aligned}
 \tag{1.11}$$

Where $Logit[P]$ represents the probability of respondents having increase in their community and political participation. β_0 is the intercept. X_1 - X_{13} are the independent variables where X_1 is amount of loan, X_2 is increase in mobility, X_3 is engagement with income-generating activities, X_4 is area of the respondents, X_5 is increase in household income, X_6 is increase in savings, X_7 is increase in land, X_8 is increase in house, X_9 is increase in communication skills,

X_{10} is length of membership, X_{11} is MFI membership, X_{12} is age of the respondents and X_{13} is education level of the respondents. This model is picked up considering the goodness of fit test that passed the assumption.

6.2.2 Measurement of key variables

Ganle et al., (2015) mentioned that women's capacity to take participation and influence decisions in household can be considered as one of the foremost segments of empowerment in male-controlled society. As Bangladesh is patriarchal society, men's domination is observable in all communities across the country. Women are empowered when they have increased welfare through their engagement in non-conventional spaces. In south Asia, women usually do not have choices, for example, purchasing and selling of land and property, family planning and using contraception, deciding their children's education and marriage (Swain & Wallentin, 2009; Kabeer, 1999). Therefore, this study has deployed women's agency of decision-making as a proxy of social empowerment. This variable is also adopted by other research to measure the women's empowerment (*e.g.* Weber & Ahmad, 2014; Mahmud et al., 2012; Garikipati, 2008).

Similarly, most of the independent variables used in the previous model are also used in this model to check the impact of agency of decision-making. However, there are few changes on the adoption of independent variables in light of the relevancy of the variables. Increase in literacy skills, increase in communication skills and increase in livestock (Garikipati, 2008) are added (all are in five point Likert scale). Women's agency of decision-making is assumed to be influenced with the increase in literacy, communication and livestock. Also, amount of women's household income is included in this model. Researcher expects that larger the amount of income, more the probability of having increase in women's agency of decision-making. This variable is measured through the indicators used in other studies (*e.g.* Swain & Wallentin, 2017; Weber & Ahmed, 2014; Mahmud et al., 2012). Indicators are mentioned in chapter (4).

Mobility is utilised to measure empowerment in some studies (*e.g.* Ganle et al., 2015; Mahmud et al., 2012; Hashemi et al., 1996). This study also used mobility as a proxy of women's social empowerment. Likewise, most of the independent variables used in previous model are also used in this model. Increase in women's agency of decision-making used as an explanatory variable in this model as it is expected that with more autonomy of decision-making, women will have more freedom of movement. Empowerment in one indicator can sometimes lead to empowerment in other indicator (Mahmud et al., 2012). Also, increase in house (five point Likert scale) is added as an independent variable as it is expected that mobility may increase with the increase in house such as repair or construction of new one. Increased capabilities to renovate or build new house demonstrate more weight on their capabilities, thus may have impact on their mobility. Moreover, household size (continuous variable) is also used to see its impact on mobility. Women may have lesser mobility when the number of household members is large. Women in-law's house are also dominated by other household-members, such as brother or sisters-in-law. Therefore, women may have more probability to increase their mobility when there is smaller household comparatively. This variable is measured through the indicators used in other studies (*e.g.* Mahmud et al., 2012; Hashemi et al., 2012). Indicators are mentioned in chapter (4).

Community and political participation is used by few studies to measure empowerment (*e.g.* Swain & Wallentin, 2017; Goldman & Little, 2015; Kabeer et al., 2012) as political dimension of empowerment is not well-focused by the researchers. Following their adoption of this variable, women's community and political participation is used as proxy of women's political empowerment. This model is similar to the previous model, except a change on independent variables. Women's mobility is one of the independent variables as it is expected that increased mobility will impact their community and political participation. This variable is measured through the indicators used in other studies (*e.g.* Swain & Wallentin, 2017; Goldman & Little, 2015; Kabeer et al., 2012). Indicators are mentioned in chapter (4).

6.3 Research findings

6.3.1 Descriptive results

6.3.1.1 Women's agency of decision-making

Table 6.4 (Appendix 16) depicts the data on agency of women's decision-making after joining the MFIs. Most of the respondents have that agency to use household income as 45.3% and 9.1% respondents agreed and strongly agreed respectively in having a say in use of household income. However, 20% of the respondents were neutral. Shockingly, most of the respondents are found not to have that autonomy to have a say in applying for a loan as 9.1% and 47.7% of the respondents disagreed and strongly disagreed respectively. 1.1% of them neither agreed nor disagreed. Appallingly, 52.6% of the strongly disagreed in relation to work outside home while 9.1% disagreed. On contrary, 18.6% and 17.5% of the respondents strongly agreed and agreed that they can work outside without any permission of household members. With respect to decision-making in buying furniture for household, majority of the respondents had that power to participate in decision-making as 54% and 25.6% respondents agreed and strongly agreed respectively in this issue. Only 3.2% of the respondents neither agreed nor disagreed. With respect to visiting doctors for children and for herself, majority achieved that power to make decision as 39.6% and 28.4% agreed and strongly agreed respectively. With regards to visiting natal house, less than half of the respondents said they can visit without other household members' permission where only 22.8% agreed and 22.1% strongly agreed respectively. Another 52% of the respondents mentioned they need to take permission either from husband or their children prior to visit. In terms of participating in family planning, respondents are divided on their opinion on it as around 30.9% and 17.2% agreed and strongly agreed where around 15.8% and 27.4% disagreed and strongly disagreed respectively. Another 8.8% of the respondents neither agreed nor disagreed. Similarly, regarding decision-making in buying or selling property or livestock, majority mentioned they have more say after joining MFIs as

40.4% and 20.4% of the respondents are found in agreeing and strongly agreeing respectively. Overall, 35% of the respondents agreed in increasing agency of decision-making.

6.3.1.2 Women's mobility

Table 6.5 (Appendix 17) represents women's mobility after joining MFIs. 7.0% and 55.4% disagreed and strongly disagreed respectively in visiting friends outside the village. They still have to ask for the permission of their husband to go outside the village. Similar situation is found in terms of visiting market alone where 5.6% disagreed and 42.5% strongly disagreed respectively. On the contrary, 22.1% and 27.7% agreed and strongly agreed correspondingly as they can make the decision in visiting market. The picture is completely different with regards to visit hospital or clinic alone. Majority responded that they have that agency to make decision in this regard where 39.6% agreed and 28.4% strongly disagreed. Overall, 36.4% women agreed in increasing their mobility.

6.3.1.3 Women's community and political participation

Table 6.6 (Appendix 18) represents the data of women's community and political participation after joining MFIs. In relation to participate in shalish, majority respondents responded that they do not go to shalish. Only 31.9% said they join shalish while 68.1% said they do not go to this kind of gathering. In terms of village committee, 11.6% reported that they are members in a committee in their community while 88.4% were not in any committee. With regards to participation in collective action such as in protesting against someone who beats his wife, 54.7% of the respondents are found in joining collectively against such kind of incidents. As far as political participation is concerned, it turns out that 87.4% of the respondents voted in last election while 12.6% did not. With respect to campaigning for any candidates in last election, 88.1% respondents have not campaigned while 11.9% did. Usually women are not politically active in terms of working for any candidates, however, some do in case their relatives stand as candidates. In terms of communication with the government officials, 95.1% said they did not

have any interaction with government officials. Similarly, regarding interaction with the political representative, it appears that 64.6% respondents mentioned they never had any interaction while 35.4% revealed about their interaction when necessary. With respect to know the name of Member of Parliament (MP), shockingly 64.9% respondents do not know the name. Nevertheless, the situation is completely opposite when they were asked the name of the prime minister of the country where 73.3% of the respondents are reported to know the name of the prime minister. Overall, 25.3% increased community and political participation.

6.3.2 Bivariate analysis

6.3.2.1 Increase in women's agency in decision-making, amount of loan and area of the respondents

There is an evidence of relationship found between the indicators of women's agency in decision-making and the amount of loan received by respondents. Results show that women have a say in family planning and in buying or selling property/livestock are significant at 5% (Appendix 19). Four indicators of women's agency in decision-making and the area of respondents are found significant. Women's have a say in buying furniture and have a say in family planning are significant at 5%. On the other hand, they have a say in treatment of sick children and have a say in buying or selling property/livestock are found statistically significant at 1%. It means there is an evidence of relationship between these indicators and the area of respondents (Appendix 20).

6.3.2.2 Increase in women's mobility, amount of loan and area of the respondents

In terms of women's mobility, there is no evidence of relationship found between the indicators of women's mobility and amount of loan received by respondents (Appendix 21). However, two of the indicators of women's mobility and the area of respondents have relationship. Indicators such as visiting market alone and visiting hospital and clinic are found statistically significant at 1% (Appendix 22) and it means there is an evidence of strong relationship between these indicators and the area of the respondents.

6.3.2.3 Increase in community and political participation, amount of loan and area of the respondents

Likelihood ratio chi-square is also conducted between the indicators of women's community and political participation and amount of loan (Appendix 23). The results show that there is an evidence of relationship between the amount of loan and two of the indicators of community and political relationship as women's participation in collective action and know the name of prime minister are found significant 1% and 5% respectively. Community and political participation is also investigated with the area of respondents (Appendix 24). The results of likelihood ratio chi-square test portray that women's participation in collective action, casting vote in last local election and know the name of local member of parliament are found significant where first two are at 1% and last one is at 5%. Remaining indicators appeared insignificant means there is no relationship between them and the area of respondents.

6.3.3 Kruskal-Wallis test

6.3.3.1 Kruskal-Wallis test on women's agency of decision-making, amount of loan and area of respondents

Kruskal-Wallis test is conducted between women's agency in decision-making and amount of loan received by respondents. The results show that having a say in buying or selling property/livestock is found significant at 5% (Appendix 25). It means there is a relationship between this indicator and the categories of amount of loan. However, none of the categories of loan is found statistically different when Post-hoc test is conducted. Kruskal-Wallis test is conducted to see whether there is any difference in women's agency in decision-making between the areas of respondents. Results show that two of the indicators are found significant. Having a say on treatment of sick children is significant at 1%, it means there is a statistically significant difference in this indicator between the areas of respondents (Appendix 25). Similarly, having a say in buying or selling property/livestock is also found significant at 5%, it means there is a relationship between this indicator and the area of respondents (Appendix 26). Post-hoc analysis

shows that rural to urban (.003) and semi-urban to urban (.031) are significantly different for having a say in taking her sick children while rural to semi-urban is not. Similarly, for having a say in buying or selling property/livestock, rural to urban (.049) and semi-urban to urban (.022) are found statistically significant while others are not.

6.3.3.2 Kruskal-Wallis test on women's mobility, amount of loan and area of the respondents

Similarly, Kruskal-Wallis test is conducted to know the difference in women's mobility between the categories of loan amount. The results of the test show that none of the indicators is found significant (Appendix 27). However, two of the indicators are found significant when area of the respondents is concerned. Visiting market alone and visiting hospital and clinic alone appear statistically significant as it is at 1%, it means, there is a strong relationship with the area of respondents (Appendix 28). Post-hoc analysis shows that all three categories are significantly different from each other for visiting market alone where rural to semi-urban (.031), rural to urban (.001) and semi-urban to urban (.007) are significantly different from each other. With respect to visiting hospital and clinic alone, rural to urban (.003) and semi-urban to urban (.031) are found significantly different while rural to semi-urban is not.

6.3.4 Empirical results

Model 4: Increase in women's agency of decision-making

Model 4 examines the impact of microfinance on the agency of decision-making (Table 6.1). The model in this research is well fitted as it is statistically significant which means null hypothesis can be rejected that the model without predictors is as good as with predictors. Parallel line test is found insignificant that confirms meeting the assumptions. The goodness of fit measures also confirm the model fit. Model 4 shows that amount of loan received by respondents and household income range are not significant.

Table 6. 1 Increase in women's agency of decision-making

Variable	Categories	B	Std. Error	Wald	Df	Sig.p	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold INAGNDECMK	Disagree	-2.467**	.798	9.557	1	.002	-4.031	-.903
	Neutral	-.805	.785	1.051	1	.305	-2.343	.734
	Agree	0 ^a	.	.	0	.	.	.
Location LOANAMNT (BDT)	10001-20000	.186	.431	.186	1	.666	-.659	1.032
	20001-40000	.535	.413	1.679	1	.195	-.275	1.345
	40001-60000	-.356	.398	.802	1	.371	-1.136	.424
	60001-80000	-.147	.444	.110	1	.740	-1.017	.723
	80001-100000	.319	.552	.333	1	.564	-.764	1.401
	100001-120000	0 ^a	.	.	0	.	.	.
HOUINCMF	Less than 5000	.161	.457	.124	1	.725	-.735	1.058
	5001-10000	-.161	.345	.218	1	.641	-.837	.515
	10001-15000	-.314	.339	.860	1	.354	-.979	.350
	150001-20000	.582	.418	1.939	1	.164	-.237	1.402
	More than 20000	0 ^a	.	.	0	.	.	.
AREA	Rural	-.794*	.356	4.982	1	.026	-1.492	-.097
	Semi-urban	-.326	.324	1.015	1	.314	-.961	.309
	Urban	0 ^a	.	.	0	.	.	.
INCGENACT	Women	.065	.319	.042	1	.838	-.561	.691
	Men	-.314	.316	.992	1	.319	-.933	.304
	Nobody	0 ^a	.	.	0	.	.	.
INWOMSAVINGS	No	-.180	.263	.470	1	.493	-.695	.335
	Yes	0 ^a	.	.	0	.	.	.
INLAND	Disagree	.284	.347	.670	1	.413	-.396	.965
	Neutral	.575	.731	.619	1	.431	-.857	2.007
	Agree	0 ^a	.	.	0	.	.	.
INOTHASSETS	Disagree	-.384	.255	2.266	1	.132	-.884	.116
	Neutral	-1.029	.709	2.106	1	.147	-2.418	.361
	Agree	0 ^a	.	.	0	.	.	.
INPOULIVSTK	Disagree	-.536	.276	3.778	1	.052	-1.077	.004
	Neutral	-.831*	.360	5.338	1	.021	-1.536	-.126
	Agree	0 ^a	.	.	0	.	.	.
INCOMUNCNSKLS	Disagree	-.060	.782	.006	1	.939	-1.592	1.472
	Neutral	.785	1.302	.363	1	.547	-1.767	3.337
	Agree	0 ^a	.	.	0	.	.	.
INLTRCYSKLS	Disagree	-1.222**	.461	7.027	1	.008	-2.126	-.319
	Neutral	.161	1.446	.012	1	.911	-2.672	2.995
	Agree	0 ^a	.	.	0	.	.	.
LNGTHMRSH	1-3 Years	-.348	.319	1.188	1	.276	-.973	.278
	4-5 Years	-.318	.369	.743	1	.389	-1.042	.405

	More than 5 Years	0 ^a	.	.	0	.	.	.
MFIMBRSH	GB	-.441	.290	2.305	1	.129	-1.010	.128
	BRAC	0 ^a	.	.	0	.	.	.
AGE	18-40	.053	.352	.023	1	.880	-.637	.743
	40 -49	-.043	.381	.012	1	.911	-.790	.705
	50 or more	0 ^a	.	.	0	.	.	.
EDUCN	No education	.038	.325	.014	1	.907	-.600	.676
	Primary School	-.048	.301	.026	1	.873	-.638	.541
	High school or above	0 ^a	.	.	0	.	.	.

Number of observations= 285, $R^2 = .155$ (Cox & Snell), .174 (Nagelkerke), Parallel line assumption is met, Model χ^2 (32)= 42.72, $P < .000$; * $p < .05$, ** $p < .01$

Note: LOANAMNT- Amount of loan, HOUINCMAF- Household income after joining MFIs, AREA- Area of the respondents, INCGENACT- Income-generating activities, INWOMSAVINGS- Increase in women's savings, INLAND- Increase in land, INOTHASSETS- Increase in other assets, INPOULIVSTK- Increase in poultry or livestock, INCOMUNSKLS- Increase in communication skills, INLTRCYSKLS- Increase in literacy skills, LNGTHMRSH- Length of membership, MFIBRSHP- MFI membership, AGE- Age of the respondents and EDUCN- Education level of the respondents.

AREA is found significant ($p=.026$) at 5% and shows the negative coefficient. It indicates that women who live in rural areas versus urban areas have 55% ($1-e^{-.794}$) lower chance to agree in increasing agency of decision-making. Moreover, INPOULSTK significantly predicted increase in agency of decision-making. Odds ratio for this variable indicates that women who were neutral versus agree in increasing their poultry and livestock have 56.4% ($1-e^{-.827}$) lower chance to agree in increasing of agency of decision-making. Furthermore, INLTRCYSKLS significantly (.008) predicted women's agency of decision-making. Odds ratio indicates that women who disagreed versus agreed in increase in literacy skills have around 71% ($1-e^{-1.222}$) lower probability to agree in increase in agency of decision-making, remaining all other variable constant. Other variables of this model are found insignificant.

Model 5: Increase in women's mobility

Model 5 examines the impact of microfinance on women's mobility. The model in this research is well fitted as it is statistically significant which means null hypothesis can be rejected that the model without predictors is as good as with predictors.

Table 6. 2 Increase in women's mobility

Variable	Categories	B	Std. Error	Wald	Df	Sig.p	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold INMOBILITY	Disagree	-4.897**	.892	30.124	1	.000	-6.645	-3.148
	Neutral	-2.746**	.834	10.840	1	.001	-4.380	-1.111
	Agree	0 ^a	.	.	0	.	.	.
Location LOANAMNT(BDT)	10001-20000	.350	.542	.417	1	.518	-.712	1.412
	20001-40000	-.060	.519	.013	1	.908	-1.077	.957
	40001-60000	.534	.525	1.036	1	.309	-.494	1.563
	60001-80000	.746	.592	1.589	1	.207	-.414	1.905
	80001-100000	-1.127	.699	2.600	1	.107	-2.496	.243
	100001-120000	0 ^a	.	.	0	.	.	.
INAGNDECMK	Disagree	-6.567**	.605	117.914	1	.000	-7.752	-5.382
	Neutral	-3.391**	.413	67.423	1	.000	-4.201	-2.582
	Agree	0 ^a	.	.	0	.	.	.
INCGENACT	Women	-.889*	.433	4.225	1	.040	-1.737	-.041
	Men	-.289	.422	.469	1	.494	-1.117	.539
	Nobody	0 ^a	.	.	0	.	.	.
AREA	Rural	-1.302**	.454	8.240	1	.004	-2.191	-.413
	Semi-urban	-.506	.397	1.620	1	.203	-1.284	.273
	Urban	0 ^a	.	.	0	.	.	.
INHOUIINCOME	No	.670	.392	2.923	1	.087	-.098	1.437
	Yes	0 ^a	.	.	0	.	.	.
INWOMSAVINGS	No	-.210	.340	.382	1	.536	-.877	.456
	Yes	0 ^a	.	.	0	.	.	.
INLAND	Disagree	-.414	.428	.932	1	.334	-1.253	.426
	Neutral	1.482	.951	2.428	1	.119	-.382	3.346
	Agree	0 ^a	.	.	0	.	.	.
INHOUSE	Disagree	-.396	.351	1.270	1	.260	-1.085	.293
	Neutral	-.440	.863	.261	1	.610	-2.131	1.250
	Agree	0 ^a	.	.	0	.	.	.
INOTHASSETS	Disagree	.242	.327	.549	1	.459	-.398	.883
	Neutral	.361	1.093	.109	1	.741	-1.782	2.504
	Agree	0 ^a	.	.	0	.	.	.

INCOMUNCNSKLS	Disagree	-.438	1.118	.153	1	.695	-2.630	1.754
	Neutral	-.245	1.629	.023	1	.880	-3.439	2.948
	Agree	0 ^a	.	.	0	.	.	.
INLTRCYSKLS	Disagree	.062	.582	.011	1	.915	-1.078	1.203
	Neutral	-1.259	1.609	.612	1	.434	-4.412	1.894
	Agree	0 ^a	.	.	0	.	.	.
LNGTHMBRSHP	1-3 Years	.597	.439	1.853	1	.173	-.263	1.457
	4-5 Years	.134	.489	.075	1	.785	-.826	1.093
	More than 5 Years							
	More than 5 years	0 ^a	.	.	0	.	.	.
MFIMBRSH	GB	.532	.386	1.894	1	.169	-.225	1.289
	BRAC	0 ^a	.	.	0	.	.	.
AGE	18-40	-.377	.450	.702	1	.402	-1.26	.505
	40 -49	.231	.498	.215	1	.643	-.745	1.206
	50 or more	0 ^a	.	.	0	.	.	.
EDUCN	No education	-.044	.432	.011	1	.918	-.892	.803
	Primary School	-.266	.405	.431	1	.512	-1.06	.528
	High school or above	0 ^a	.	.	0	.	.	.

Number of observations= 285, $R^2 = .605$ (Cox & snell), .69 (Nagelkerke), Parallel line assumption is met, Model $\chi^2 (30) = 40.89$ $P < .000$; * $p < .05$, ** $p < .01$

Note: LOANAMNT- Amount of loan, INAGNDECMK- Increase in agency of decision-making, INCGENACT- Income-generating activities, AREA- Area of the respondents, INHOUINCOME- Increase in household income, INWOMSAVINGS- Increase in women's savings, INLAND- Increase in land, INHOUSE- Increase in house, INOTHASSETS- Increase in other assets, INCOMUNSKLS- Increase in communication skills, INLTRCYSKLS- Increase in literacy skills, LNGTHMRSH- Length of membership, MFIBRSHP- MFI membership, AGE- Age of the respondents and EDUCN- Education level of the respondents.

Parallel line of assumptions shows insignificant that confirms meeting the assumptions. The goodness of fit measures also confirms the model fit. INAGNDECMK, INGENACT and AREA are statistically significant. INAGNDECMK is strongly related ($p = .001$) with increase in women's mobility (INMOBILITY) after joining MFIs. Odds ratio indicates that women who disagreed in increase agency of decision-making have 99.8% ($1 - e^{-6.567}$) lower chance to agree in increasing their mobility after joining MFIs. Similarly, women who were neutral versus agree

have 96.6% ($1 - e^{-3.391}$) lower chance to agree to increase their mobility. Moreover, INCGENACT is significant at 5% ($p = .040$) and coefficient is negative. Odds ratio indicates that women engaged with income-generating activities versus when they are not engaged have 58.9% ($1 - e^{-.889}$) lower possibility to increase their mobility. Furthermore, AREA is significant at 1% ($p = .004$) which demonstrates very strong relationship with INMOBILITY. Odds ratio indicates that women who live in rural areas compared to urban area have 72.8% ($1 - e^{-1.302}$) lower probability to agree in increasing their mobility after joining MFIs.

Model 6: Increase in women's community and political participation

Model 6 correctly predicted 91.5% of cases no increase in communication and political participation and 40.3% of cases where there is an increase in communication and political participation, giving an overall percentage correct prediction rate of 78.6%. This model can explain 30.2% of variance of increase in communication and political participation. It found two explanatory variables statistically significant- INMOBILITY and INCGENACT. INMOBILITY ($p = .001$) significantly predicted increase in community and political participation (INCOMPOLPRCPN) after joining MFIs. Odds ratio indicates that women who disagreed versus agreed in increasing their mobility have 82.9% ($1 - e^{-1.766}$) lower chance to increase their participation after joining MFIs. Similarly, women who were neutral versus agree in increasing their mobility have 64.2% ($1 - e^{-1.030}$) lower probability to increase their community and political participation. With respect to INCGENACT, women's engagement with income-generating activities is found to have strong relationship with INCOMPOLPRCPN. Odds ratio indicates that women who were engaged in income-generating activities have 72.5% ($1 - e^{-1.292}$) lower probability to involve with community and political activities compared to who were not. Similarly, when they were not engaged but men from their household engaged with income-generating activities have 72.7% ($1 - e^{-1.299}$) lower probability to increase their community and

political participation. Remaining variables are not significant predictors of increase in community and political participation.

Table 6. 3 Increase in women's community and political participation

Variable	B	Std. Error	Wald	df	Sig.p	Exp (B)	95% Confidence Interval	
							Lower Bound	Upper Bound
LOANAMNT (BDT)	-.757	.590	1.646	1	.200	.469	.148	1.491
10001-20000	.321	.521	.379	1	.538	1.378	.496	3.830
20001-40000	-.032	.503	.004	1	.949	.968	.361	2.593
40001-60000	-1.009	.671	2.262	1	.133	.364	.098	1.358
60001-80000	.453	.669	.458	1	.498	1.573	.424	5.837
80001-100000								
100001-120000 (Ref)								
IMMOBILITY	-1.766**	.389	20.589	1	.000	.171	.080	.367
Disagree								
Neutral	-1.030*	.435	5.602	1	.018	.357	.152	.838
Agree (Ref)								
INCGENACT	-1.292**	.433	8.897	1	.003	.275	.118	.642
Woman								
Men	-1.299**	.422	9.458	1	.002	.273	.119	.624
Nobody (Ref)								
AREA	.068	.519	.017	1	.896	1.070	.387	2.957
Rural								
Semi-urban	.718	.436	2.720	1	.099	2.051	.873	4.817
Urban (Ref)								
INHOUICOME	-.318	.397	.641	1	.423	.728	.334	1.585
No								
Yes (Ref)								
INSAVINGS	-.332	.363	.839	1	.360	.717	.352	1.460
No								
Yes (Ref)								
INLAND	-.627	.433	2.094	1	.148	.534	.228	1.249
Disagree								
Neutral	-.862	.982	.770	1	.380	.422	.062	2.895
Agree (Ref)								
INHOUSE	.157	.355	.195	1	.658	1.170	.584	2.344
Disagree								
Neutral	.755	.773	.954	1	.329	2.127	.468	9.670
Agree (Ref)								
INCOMUNCNSKLS	-1.360	1.263	1.159	1	.282	.257	.022	3.052
Disagree								
Neutral	1.354	1.409	.924	1	.336	3.874	.245	61.297
Agree (Ref)								
LNGTHMRSH	-.184	.453	.165	1	.685	.832	.342	2.022
1-3 Years								
4-5 Years	-.620	.547	1.287	1	.257	.538	.184	1.570
More than 5 Years (Ref)								
MFIBRSHP	.132	.399	.109	1	.742	1.141	.522	2.492
GB								
BRAC (Ref)								

AGE 18-39	-.503	.465	1.173	1	.279	.605	.243	1.503
40-49								
50 o more (Ref)	-.038	.503	.006	1	.939	.962	.359	2.581
EDUCN No education	-.348	.455	.584	1	.445	.706	.290	1.723
Primary School								
High School or above (Ref)	.181	.421	.185	1	.667	1.199	.525	2.735

Notes: Ref stands for reference group

LOANAMNT- Amount of loan, INMOBILITY- Increase in mobility, INCGENACT- Income-generating activities, AREA- Area of the respondents, INHOUINCOME- Increase in household income, INWOMSAVINGS- Increase in women's savings, INLAND- Increase in land, INHOUSE- Increase in house, INCOMUNSKLS- Increase in communication skills, LNGTHMRSH- Length of membership, MFIBRSHP- MFI membership, AGE- Age of the respondents and EDUCN- Education level of the respondents.

6.4 Discussion of the findings

This study aims to assess the impact of microfinance products on women's social and political empowerment through women's agency of decision-making, mobility and community and political participation. Based on the literature review, it proposed fourth hypothesis (H₄) of this research-women increase agency of decision-making after joining the MFIs. Because of patriarch domination in Bangladesh, women's influence in decision-making over others in their households are considered as one of the significant indicators of empowerment, more specifically social empowerment. Primary analysis recommends that after joining MFIs, more than 50% of respondents are able to apply their choice in some household decisions (Appendix 17) such as use of household income (54.4%), buying furniture (79.6%), treatment of children (79%) and buying or selling property/livestock (60.8%). In other words, more women are more likely to have power relatively to make decisions in these four indicators and less likely to have power in other indicators such as applying for loan, working outside home, visiting father's home and family planning. Women's decision-making role within the households demonstrates women's relationships with other households and also how they are valued by the family

members. Ability to spend the household money and purchasing necessary stuff without seeking permission from others indicates the materialistic empowerment, at the same time, incorporates women's personal agency. On contrary, ability to make the decision on family planning and working outside without the permission of others represent more weight in agency of decision-making. Thus, inability to make decisions in these indicators shows no progress even after the engagement with MFIs. In a patriarchal culture like Bangladesh, women are discouraged to participate in this type of decisions and it is supported by the findings of this research.

Likelihood ratio Chi-square test confirms the relationship between the amount of loan and only one indicator (buying or selling property/ livestock) of agency of decision-making. It was further supported by Kruskal-Wallis test. Nevertheless, empirical model (1.5) suggests that the amount of loan, amount of household income and increase in savings are not statistically significant. A plausible explanation behind this is that the greater access to finance not necessarily influence their power in some issues in household. From a systematic literature review, Kabeer (2017) also reported similar findings regarding women's decision-making. They have mentioned neither women's earning ability nor microfinance engagement influence women's say within the family. Nevertheless, study of Ganle et al., (2015) contradicts the findings of this research. They have asserted that women are able to participate in family decision-making because of gaining financial access. They have also mentioned that women have lost control of their loans and enterprises to their husbands, still they are able to make family decisions because of their ability to pull the finance to the household. On contrary, women are found more likely to disagree in increasing agency of decision-making who did not agree in increasing human capital such as literacy skills after joining MFIs. In a men's dominated society, it is unimaginable that women with no literacy skills participate in the household-decisions, however it may happen in fewer households. Literacy acts as a form of 'conscientization' (Freire, 1970) that creates spaces where women can challenge the current norms of the society. Knowing how to write, read and calculate certainly make someone confident within the family. Rahman (1999) stated that even

the ability to know how to write name is a source of pride in Bangladesh and it provides a sense of confidence as they do not have to use fingerprints anymore when necessary. It also works as a process to change the way of thinking such as learning the significance of education, thus, motivates to educate their children. Therefore, it can be suggested that human capital is critical in increasing agency of decision-making. This way involvement of GB/BRAC leads to a change in attitudes and beliefs related to family and social norms.

Raising poultry/livestock is assumed to be a great source of earning for microfinance clients, especially for women in Bangladesh as it is possible to do it from home. Women frequently are found in engaging in this activity while men are busy in outside work. Increase in poultry and livestock signifies the increased capacity of women. In this study, women who disagreed in increase in poultry and livestock are nearly found statistically significant, however, women who were neutral are more likely to disagree in having increased agency of decision-making. Most importantly, as microfinance provides services generally to women, they are considered as a fundamental source of fund by her husband or other members of family. Therefore, she enjoys increased status and bargaining position within the household as a potential source of funds. It shows joining MFIs have facilitated them on their bargaining position though the amount of loan, household income and savings are not statistically significant. These findings resemble with the findings of Angelucci et al., (2015) where their study reports modest increase in intra-household decision-making power despite of no evidence of statistically significant effects on household income. Perhaps, self-confidence and human capital derived after involving with the MFIs and thus, can influence the agency of decision-making because of their improved status. This statement is also corroborated by other studies (Goldman & Little, 2015; Holovet, 2005; Mahmud, 2003). Fewer women in rural areas compared to urban areas are reported in terms of increasing agency of decision-making. Empirical model also supports the descriptive findings as women's area is found statistically significant which shows that women from rural areas are more likely to disagree to have increased agency of decision-making. Rural women are usually

less powerful than women from towns or cities in Bangladesh because of the cultural practice where women are usually more dominated by the household members. The relationship is also supported by the findings of likelihood ratio chi-square as relationship found between the areas and four indicators of women's increased agency of decision-making. This study contradicts the findings of Weber and Ahmad (2014) as they found no relationship between the areas of respondents and social and financial empowerment.

Women's participation with MFIs also assumed to increase their mobility. Women in Bangladesh are disadvantaged as they are not allowed to go outside without the permission of husband or other household members. The fifth hypothesis (H₅) of this research is that women increase their mobility after joining MFIs. Initial analysis suggests that not even 50% of women have increased their mobility on two of the indicators (visiting friends outside the village, visiting market alone) while 70% of the respondents can visit hospital and clinic alone. Going outside the village without anybody's permission demonstrates a larger extent of personal agency which shows women's freedom of movement. Similar findings also suggested by the study of Mahmud (2003) as her findings concluded that microcredit programmes expand women's mobility into certain public spaces such as NGO office and health centres, however, do not bear much weight in terms of their mobility. She argued that women's mobility to market and community demonstrate more robust than NGO and health centres. Women's visit in the market proves more autonomy as it shows women have access to that space which is considered as men's sphere in Bangladesh. The likelihood ratio Chi-square test shows that there is no evidence of relationship between the amount of loan and mobility indicators. Kruskal-Wallis test also provides similar results. It was further confirmed by the empirical model of this research as amount of loan is not statistically significant. However, women's agency of decision-making is reported to have strong relation with women's increased mobility. Finding of this study with respect to mobility is also supported by a very recent study conducted in India by Kumar et al., (2019). They suggest that women from microfinance, especially from SHG groups less likely to

require permission from their husband or other family members to go outside, such as joining a village meeting which indicates their increased mobility. It demonstrates the uplift of their decision-making power in terms of going outside, particularly in village meetings where women are not usually allowed to join in south Asia. It is a great progress and influence of MFIs as it is one of the significant indicators of social empowerment.

It was a surprise that income-generating activities had no relationship with women's mobility which was expected. A large percentage of women who receives loans has been engaged with those businesses which can be operated from home, given that they still play the role of housewife. For instance, setting-up a small tea-stall or tailoring shop at the front of their house do not require them to go outside home. This could be the reason behind no relationship of income-generating activities and the mobility. This model also suggests that respondents' areas are influential predictor as it is found that women from rural areas are less likely to increase their mobility after joining MFIs. The relationship between the areas of respondents and mobility indicators was also reported by the likelihood ratio chi-square and Kruskal-Wallis test. This is not unanticipated matter in a patriarch society where women in rural area are more restricted than women from town or city. In Bangladesh, joint families still exist in rural areas where usually other household members such as father/mother-in-law's permission is compulsive to go out of the house and engage in other domestic matters of the family. Most importantly, family finance is also controlled by in-laws where women have to ask to purchase their daily usable products from market, even for medication and other purposes. However, situation might be different if they are in bad physical condition, permission of other family members such as husband may be enough in this case. Women may have high mobility in those families where husband lives in abroad because of his job. On the contrary, women from urban areas may have more mobility than rural or semi-urban because of education, more media exposure, ownership of wealth assets. This is corroborated by the study of Murshid and Ball (2018). Also, as men are busy in activities for income-generating purpose, women have to

accompany their children to educational institutions and also in hospitals and clinics when needed. Moreover, women also work outside alongside their husbands in urban areas to maintain the living cost. Therefore, it can be said that financial capital is not working as fundamental motivator in agency of decision-making.

Political domain in empowerment context is not investigated frequently despite its equal importance to other dimensions of empowerment. For instance, those with formal or casual political power hold control over other social organisations- education or households. This way, impact on political empowerment is considered more robust than impact on other domains of empowerment. Women's empowerment in the political domain is considered as a procedure of expanding abilities, prompting more noteworthy autonomy of societal decision-making (Sundstrom et al., 2017) than other dimensions of empowerment. Likewise, participation in political activities is one of the strong indicators of empowerment in Bangladesh as women are commonly debilitated to participate in community and political exercises. Subsequently, sixth hypothesis (H_6) of this study is that women increase their political empowerment after getting the access to microfinance services. Women's confinement to the surroundings of her households refer as disempowerment, therefore, mobility is irreplaceable aspect of women's empowerment (Kishore, 2000). It is expected that someone with greater ability of mobility will have more engagement in political and community participation. Consequently, mobility is added to the empirical model as a predictor of political and community participation along with other variables.

Primary analysis reports that more than 60% of respondents are active in three of eight (voted in local election, interaction with local political representatives and know the name of Member of Parliament) indicators of community and political participation. It demonstrates that it was not a great progress overall as not more than 45% of women were active in other indicators after

joining MFIs. Chi-square test shows the relationship of two indicators (participation in collective action and vote in last election) with the amount of loan and three indicators (participation in collective action and vote in last election, know the name of local Member of Parliament) with the area of respondents.

Firstly, women's engagement with microfinance is suggested to increase the social capital through expanding network and increasing communication skills. It is anticipated that women will improve their communication skills once become a part of a large community. Descriptive findings also show that women have overwhelmingly increased their communication skills after joining MFIs as more than 90% of respondents agreed. However, this study found no relationship between the communication skills and their community and political participation. Findings show that neither weekly nor monthly meeting is conducive in terms of women's political empowerment. These findings suggest that through joining the meetings, probably women have increased their interaction comparatively, however, it is not adequate to be politically empowered. On the other hand, the amount of loan is not found statistically significant by the empirical model. Findings suggest that women's access to finance is not a motivation behind their public engagement. People become politically interested and motivated by the political talks and discussion in a meeting or seminar while meetings in the centre are mostly on financial issues. Thus, this research supports the statement- 'thin' types of social capital (Rahman, 2006) and suggests activities to create thicker types of social capital through mentoring, leadership training, engagement with social awareness activities and political campaign education.

Nevertheless, women's mobility and income-generating activities are found strongly related with political participation. In terms of mobility, women who disagreed in increasing their mobility did not increase their community and political participation. Communication with other people of the community is more needed to actively participate in community and political issues. Women from microfinance programmes increase their network during the process of

receiving and repaying the loan as they get an opportunity to meet the officials and other members of MFIs. This way, they are more likely to know women from other villages, become a part of social group and may discuss the information of community and country. Women's movement outside the villages additionally encourages collaborations with a more extensive network of individuals, thus, getting access to information, know the process how and where to utilise the information. Women with more freedom of movement have more exposure to new thoughts and information. In political and community context, social capital is more important factor than financial and human capital as someone with more money and education does not necessarily have more engagement in politics and community. The result of this research is consistent with other studies of women's empowerment and political knowledge (Bleck & Michelitch, 2018). Someone with restricted mobility is not expected to have engagement with politics and community. For instance, indicators such as in joining the shalish or meeting is required more mobility as significant percentage of Bangladeshi women still are not allowed to join such kind of activities. Also, it is considered to be men's job in the society.

Lastly, engagement with income-generating activities is found negatively related with community and political participation. Women who are engaged with businesses are less likely to increase their participation. It is not expected, but not unusual. It has been mentioned earlier that still a large percentage of women are engaged with those business activities which can be conducted from home. Therefore, they run their businesses from home, thus, they may not have any public or political engagement. On the other hand, women in politics are not usually allowed and appreciated by the family and community in Bangladesh because of conservative culture. Moreover, those women who are entrepreneurs are always busy in managing their enterprise where it is probably very difficult to get time to engage in community and political activities. Thus, this research concludes that the financial access to MFIs does not impact women's political empowerment, rather their social empowerment such as freedom of movement facilitates their political empowerment.

6.5 Conclusion

Generally, women in Bangladesh are not engaged and allowed in social and political activities because of patriarchal nature. Women's social and political status can be changed when there is sufficient supply of financial, human and social resources. Therefore, the aim of this study was to generate an evidence of the impact of microfinance services on women's empowerment in the context of social and political dimensions. This study investigates the impact of financial products such as amount of loan provided to women. Also, non-financial gain such as literacy skills, communication skills and self-confidence also are incorporated to evaluate the empowerment. This study used several variables which are measured by multiple indicators as empowerment is latent phenomenon. With respect to women's agency of decision-making, women's increased literacy positively influenced the agency of decision-making. Improved literacy skills have that potentiality to make the people more cognizant of their surroundings, learn new things through reading newspapers and other materials, thus they are able to argue and negotiate logically to claim their rights. Accordingly, this study suggests the importance of human capital to women's social empowerment. The study also reports that women from rural areas suffer from lower agency of decision-making in the household compared to women from urban areas. It may happen because of lower literacy skills as fewer women from rural areas are found to have increased literacy skills compared to urban areas. Also, relative conservative nature of villages where elder people are given priorities to make the household decisions.

Findings of this study suggest that those who still have lower agency, they have lower probability to increase their mobility. Similar to agency of decision-making, women from rural areas have lesser probability of increasing mobility compared to urban areas. Women's mobility also plays significant role in increasing women's community and political participation as it is found that those who did not have increased mobility are less likely to engage with political and community activities. Women who are entrepreneurs have lower probability to involve in these activities. It is more concerning that loan size is not related with women's social and political

empowerment. However, as money is fungible, the utilisation of loan needs to be monitored. Women may end up in a disaster if the given loan is used inappropriately, thereby, will not result any empowerment effect. To conclude, along with the provision of financial products, MFIs should focus to enhance women's engagement with business activities as it would lead to the shift of power relationship between women and men or other household members. This study infers that financial products of MFIs are not influential in terms of women's social and political empowerment. Therefore, it is recommended to MFIs to consider more intensive human capital development programmes along with their financial products.

Chapter 7

Conclusion, contributions, policy implications and limitations

7.1 Conclusion of the study

Microfinance has expanded its visibility all over the world through the expansion of its interventions. However, its existence in developing countries is more known to be revolutionised prevailing traditional financial systems. Bangladesh is one of the countries where microfinance is mostly discussed phenomena within the financial context and women empowerment. Women in Bangladesh are customarily seen in doing household chores. Most of them have received little education, thus have a gap on knowledge and required skills to be engaged in economic and social activities. Patriarchal culture and social norms create an environment of restriction where women cannot go outside. Women also have accepted this condition as patriarchy has been practiced across the country decades after decades. Women who are economically inactive account for 64.6 % in Bangladesh (BBS, 2017). They are bound to rely on their husbands and household members to meet their rights including basic and human rights. They are subject to domestic violation and starvation. Moreover, they do not have any say on their individual life on account of low status, let alone households and community. The consequences of these issues are not limited to women, it has detrimental impact on the economy of Bangladesh as women constitute half of the population of the country. In such context, government and other development organizations are working to address these enduring problems in many ways. Women's access to financial resources is one them as it is critical to women's economic activities. The percentage of women clients in Bangladeshi microfinance industry demonstrates women's inclusion into financial systems where their access had been denied previously. Financial inclusion of women is certainly a positive aspect of the expansion of MFIs where women find more opportunities to explore the economic spheres with their latent potentiality. Nevertheless, financial inclusion does not automatically empower women where borrowing an amount of loan incur interest and are supposed to be reimbursed from the very

next week or month. Therefore, it stands out as a question of whether women's financial inclusion really empowers women. It is assumed that microfinance empowers women if the amount of loan received from microfinance programmes is used in income-generating activities. The purpose of this research is to propose an evidence of women's empowerment in economic, social and political dimensions from their access to financial and non-financial resources of microfinance programmes.

As economic development represents the uplift of low status, this research has firstly focused to assess the change in women's household income and their own savings separately as potential indicators. The findings of the study confirmed the impact of GB and BRAC on their household income and savings. Preliminary findings suggest that access to the amount of loan of MFIs shows increasing trend on the household income in rural, semi-urban and urban area. Also, women's savings have increased after access to both programmes. This study further investigates whether amount of loan is statistically significant to household income and savings. Findings from the empirical model reports that the amount of loan has a relationship with women's household income and savings. Women have lower probability to have economic development with small amount of loan considering the impact of loan in household income. With respect to savings, the larger the amount, the more the probability women have in increasing savings. Therefore, this study suggests that amount of loan is fundamental in increasing household income and savings as women have the opportunity to save in their savings account through augmenting income.

It also suggests that women's engagement with financial activities increase the probability of increasing household income. Utilisation of the loan is highly important to have positive impact from access to resources. Loan must be utilised for income-generating activities, for repaying the loan with interest as well as for economic growth. Household income also increases for those who have comparatively longer length of membership. Thus, this research infers that women's

access to credit has positive impact on the economic growth considering their household income and savings. To explore the economic empowerment further, this study has deployed women's control over finances to assess the impact of access to credit. This research reports that a certain amount of loan is statistically significant. This category is identified as an average loan to make investment, however, this research reports that women fall in this category have lower probability to increase controlling power. This study suggests further research to find out the reason behind it as this is not incorporated in this study. Women's participation in income-generating activities is fundamental as women are likely to agree to have control over finances when they are engaged with businesses which are invested from the microfinance loan. Household income is critical to control over finances as women are more likely to have control over finances when they have increased household income. Similarly, women's increased savings is also related to control over financial resources as it has strong positive relationship. In this case, this study suggests that increase in household income and women's savings are accelerators of control over finances along with women's participation in income-generating activities. This way, this study infers that women's access to financial products create the process of women's economic development which drives women to achieve economic empowerment.

Women's empowerment in economic dimension does not mean that they will be empowered in social and political dimensions. In chapter 6, this study examines the impact of women's access to services of GB and BRAC on women's empowerment in social and political dimensions. As empowerment is a latent phenomenon, there was a challenge in deploying the right indicators for each dimension. However, agency of decision-making, increase in mobility and participation in community and politics are selected as constructs following other studies of empowerment. Women's agency of decision-making is utilised to estimate the social empowerment. It is found that financial products are not stimuli for increasing agency. Also, increased savings is also not related to agency of decision-making making. However, increase in women's literacy skills is

statistically significant. Those who have not increased literacy skills are less likely to agree to increase agency of decision-making. It means women's human capital is significant to impact the social empowerment. Though, financial products of GB and BRAC are not germane in this case, non-financial gain through the engagement is found to be significant. Women's increased mobility similarly used to estimate women's social empowerment. Likewise, it is found that financial products are not relevant to increase their mobility, however, strangely, women's participation in income-generating activities is found negatively related. Women who are more likely to increase in agency of decision-making, they are more likely to increase their mobility according to the model. Also, women from rural areas are less likely to have freedom of movement. Despite of their increased economic activities, they are still shackled with chains as they cannot move when they wish. This study suggests that, financial products of MFIs are not germane to increase their autonomy and mobility, however, non-financial achievement emanates from involvement with microfinance might benefit women in terms of their social empowerment. Women's community and political participation is related to women's mobilisation. Women's increased mobility provides the opportunity to engage with other individuals in the community through weekly or monthly meeting. Thus, women may increase their social interaction in the community. However, required knowledge to participate in the political dimension does not accrue from their repayment meeting. Women might meet each other in that meeting but their discussion may not focus on political knowledge and participation. This study infers that both financial and social capital are not germane to women's political empowerment.

The spectrum of economic empowerment is different to other dimensions of empowerment. For instance, economic empowerment refers to the attainment of materialistic achievement where social and political empowerment refers to the unmaterialistic achievements. The findings of this research show that economic empowerment can take place when women's materialistic achievement such as access to financial capital takes place. On the other hand, findings show

that financial services do not influence women's social and political empowerment in Bangladesh. Women in Bangladesh not only lack financial resources, but also lack non-financial resources such as human and social capital. Though access to financial services improves their financial health, it does not necessarily improve non-financial authority of women in their family. Nevertheless, importance of financial resources cannot be denied yet, as it initially opens the door for other types of achievements. Along with financial services, women's direct access to cognitive resources such as knowledge and skills are important for their non-financial achievements. For example, if a woman wants to take a decision on contraceptive use, she is ought to have knowledge on contraceptive in details. In the context of microfinance, it is only possible to know about the contraceptive, when education and awareness sessions are provided directly on contraceptive by the MFIs. Along with financial access, women in MFIs have a possibility to gain some non-financial achievements such as how to write the name, count a certain amount of money, communicate with officers and fellow members and thus, expand networks. Thus, random exposures and communications with others in the microfinance offices and centres create a scope for the formation of human and social capital, but these types of capitals do not have potency and are not influential to alternate the power relations in the spectrum of social and political empowerment.

7.2 Contribution of this research to knowledge

7.2.1 Theoretical contribution

Regarding the theoretical contribution, firstly, this research has the application of several empowerment theories which are widely recognised in the empowerment field such as the theories of Kabeer (1999) and Chen and Mahmud (1995) which helped to identify the factors, develop the framework and the hypotheses of this study. Most importantly, development of the conceptual framework (figure 5.1) which will enhance the use of microfinance intervention by women to engage with business activities, to increase their household income, savings and

control over finances. This framework can be applied as a significant instrument to check whether access to financial resources help to improve the financial health. Use of this framework is not limited to microfinance and empowerment, it can be used in similar fields.

Secondly, empirical research of the microfinance and empowerment have been criticised on the ground of their lack of theoretical basis. This research has the application of the bargaining theory of McElroy and Horney (1981) which shows the breakdown/fall-back position where women can be self-dependent in case, they are either divorced or do not have support from other family members. This model is not limited to two people (Husband and wife), it can be generalised to more than two people (McElroy & Horney, 1981). Breakdown position is defined by one's ability to survive and thrive outside the family. This theory is applied in this study through mathematical models to examine the impact of microfinance empirically.

This research has several implications and impacts on the microfinance and empowerment literature. First it shows, empowerment is multidimensional phenomenon where different dimensions are impacted by different factors. It is a process where researchers must investigate the dimensions of empowerment distinctly, deeply and comprehensively. It shows that access to financial resources and improvement in financial health have the potentiality to influence the economic dimension of empowerment. Relatively, women's lower business engagement even after getting access to finance of MFIs indicates the absence of other motivations. Lack of synchronisation of business development training and mentoring is a big gap to create more women entrepreneurs as they do not have any knowledge on accounting, management, and marketing of businesses. Also, finance is not a motivation in social and political dimensions of empowerment. Cultural obstructions in Bangladesh are too intense where only financial incentives are not enough for women to influence the social and political dimensions. Increase in human and social capital through microfinance such as literacy skills and communication and networking are too vague and do not have potency to establish women's social empowerment.

On the other hand, political empowerment needs the knowledge on historical and contemporary political issues which clients of microfinance do not receive from MFIs and regular engagement with political activities where clients of microfinance are rarely seen. Social and political aspects of empowerment cannot be ensured through the injection of only financial resources, they need the provision of intense skills development programme to build up the human and social capital. Thus, this research contributes to the theory through the specification of required resources for particular dimension.

7.2.2 Empirical contributions

This research aimed to assess the impact of microfinance on women's economic, social and political empowerment in Bangladesh. Though economic empowerment is well focused by the previous researchers, social and political dimensions of empowerment are not addressed relatively. This research has empirically examined the impact of microfinance on social and political empowerment alongside the economic empowerment. This research also examined the impact of economic development through household income and savings on social and political empowerment. It confirms that economic development has no relation with social and political empowerment. Moreover, women's area (rural, semi-urban and urban) is a new addition as a variable to the empowerment study which is not previously used by any other research in Bangladesh to examine the impact of microfinance in economic, social and political empowerment simultaneously. All the variables used in this study is supported by the high ranked journals (mentioned in sections 4.7, 5.3.2 & 6.2.2) which ensures the validity of the variables. Moreover, this research has the application of multidimensional nature of empowerment. The variables which are deployed to measure the dimensions of the empowerment are also measured through multiple-indicators such as control over finances is measured by 10 indicators, agency of decision-making is measured by 12 indicators, mobility is measured by three indicators and community and political participation is measured by 12

indicators so that they incorporate all of the possible aspects related to them. All the indicators are carefully selected from the literature. Thus, this research informs its empirical contribution.

7.3 Policy implications

Despite women's relative improvement in many aspects, their potentiality is still unused in Bangladesh. Specifically, their absence in the economic, social and political sphere remains vastly visible. This research proposes some policy implications in this context.

Firstly, access to economic resources is prerequisite of women's participation in the financial activities. Therefore, impediments in accessing to resources must be addressed in rural, semi-urban and urban level in Bangladesh. Regarding women's financial access, government's policy may incorporate women to the public financial system so that they receive financial capital when they need. Easing the process of women's access to resources is fundamental to the economic development of the country as women constitute half of the country's population. Also, they are more likely to pay the loan on time compared to men as financial institutions have lesser risk of losing money. This study corroborates the increased personal economic growth after getting the access to finance in terms of household income, savings and increased women's economic participation. Microfinance industry of Bangladesh turned to sustainable self-financed industry from absolute donor-dependent industry because of women's augmented savings. Considering the financial sustainability at both micro and macro levels, women's access to finances should be more liberalised at both in public and private domains of finance.

Secondly, following women's access to finance, policy should include stringent monitoring system so that it is actually women who are in control of the loan and utilise it in productive ways. To do this, a prior written business plan can be proposed as a precondition to approve the loan as it is usually provided for investing on business. However, in this process, there is a risk of denying many women who do not know about the business plan in light of their lack of knowledge. In this case, policy may incorporate compulsive business development training

services such as mentoring, business education and skills development programme. This process would equip women with required knowledge which helps to inform them about the required skills before starting a business. Training on financial management and business development would be critical to the successful businesses. This way, having cognizance on business development process would increase more probability of success, thereby, women would have more chance to increase their income through increasing profit. Only 379 MFIs in Bangladesh -are reported to provide social development programmes (CDF, 2017). On top of this, training programmes are not available in all regions because of the operational structure. Also, such programmes are costly which MFIs cannot afford. Even GB and BRAC which are major MFIs did not have any training programme in the region this study conducted. This is where the government can join with MFIs to put more weight on the services to make them more productive for the clients. Mobilisation of these services along with credit might be introduced at public and private financial institutions which not only benefit the clients, but also ensure a sustainable finance industry in Bangladesh.

Ensuring women's access to credit does not necessarily provide automatic empowerment. In terms of women's economic empowerment such as in controlling household resources, women's engagement with business activities are fundamental. Findings of this study also corroborate the significance of engaging with entrepreneurship. Nevertheless, many of the women in this study have handed their loan to other members of their households, most probably, because of their lack of knowledge and skills. Consequently, concrete business development training is fundamental rather than basic knowledge through entrepreneurial education to respond the needs to a transformed market. For instance, market is changed from industrial era to information and technology era. Many more women are in the market in light of their access to credit, thus, competition is so high. Therefore, entrepreneurial education is critical to provide managerial and leadership skills, prepare them to cope with adverse situations, make them innovative and creative. Government could take initiatives to promote women's

entrepreneurship where majority of women spend their time in organising household in Bangladesh. They need to be informed about the advantages of engaging businesses and how their family would be benefitted from the process. Also, they also need to be aware about their contribution which will impact the growth of the country. In this case, merged endeavours from MFIs and government need to be in place to make women's entrepreneurial participation which would make them self-employed. This way, Bangladesh could diminish the unemployment level where millions of women remain outside the labour force while it was 34.9 million in 2017 (BBS, 2017).

Thirdly, women's increased mobility is crucial to increase their economic, social and political participation. Findings of this study reflect the mediocre status of women's mobility. Reasons include patriarchal nature of the country where women are not allowed to move without the permission of other husband/elderly households, veil system to conform to religion, women's lack of education (Hashemi et al., 1996). Considering the number of women populations, their vulnerable status and necessity of their contribution to the economy, firstly, government should focus on renovating the nature of patriarchy. It is only possible through women's education how they will be able to achieve knowledge and skills to argue logically against the patriarchy and can progress in terms of mobility.

Fourthly, women are far behind compared to their men counterpart in terms of political participation. Likewise mobility, patriarchal nature does not encourage women to participate in community and political activities. It is argued that whether microfinance participation promotes women's political empowerment. Nevertheless, this research found no impact of participation and increased communication skills on political empowerment. Therefore, MFIs may consider initiating additional programmes such as political education and leadership training that would increase the political knowledge of women directly and inspire them to participate in political activities.

Moreover, MFIs' move to individual-lending method from group-lending method might provide more flexibility, however, group-lending method is more crucial to the clients who lack human and social capital. These are more germane in social and political dimension of empowerment. Group-lending method ensures both solidarity and liability where women receive an amount of loan and conduct their financial activities as a part of team. Likewise, they all are liable if one member defaults the instalment of loan. Thus, this process creates a pressure for the proper use of loan and reimburse the loan on time. However, recent practise of microfinance is providing individual loan to those who have no idea of proper utilisation. This way, they may end up passing the amount to other household members or losing the amount due to an inappropriate use. All the respondents of this study also received individual loan from GB and BRAC as they stopped group lending, consequently, more than half of the respondents did not use their loan themselves. In this circumstance, group lending methods may inform the ways of utilisation of the loan. There is a higher chance to get new ideas from the group members as they share the reasons of applying for the loan. Also, they share how and where they will use the loan. Therefore, MFIs could continue providing loan in a group rather individual which would increase the probability of appropriate use of loans by the appropriate person through increased social capital. Furthermore, women can take personal initiatives to help each other when someone is in personal crisis. As they meet in the centre during the repayment, they could mobilise their own co-operation in terms creating emergency fund through weekly savings. This would generate strong unity to protect themselves from any kind of abuses either in households, communities or by the MFIs. This way, it would increase their influence in community which help them to be a fundamental community and politics.

Besides, though the repayment rate of microfinance is high, it is imperative to investigate the sources of fund of repayment as clients of microfinance are reported to be multiple borrowers. Even in this research, some respondents are found to have received loan from both GB and BRAC at the same time where these MFIs provided loan despite knowing the consequence of

multiple borrowing. Women tend to be the victim of it when MFIs identify them as loan defaulters, which creates a new form of abuse and threat of taking judicial action against them. Though multiple borrowing can mitigate the problems on short term, it deteriorates the financial condition when it is used on consumption or paying another debt. MFIs should stop this practice by using credit check system to identify whether clients are already in debt. This might protect the clients from jeopardising their financial condition and also MFIs from defaulting loan, save legal cost.

Lastly, empowerment does not happen automatically because of access to financial services. Specifically, in a country like Bangladesh where women still suffer from socio-economic and cultural attributes compared to men. Therefore, it is not fair to expect that women will be empowered instantly because of their increased access to finance where it is not only the case. However, women's access to microfinance could empower women in economic, social and political dimensions if above mentioned policies are implemented by the relevant bodies.

7.4 Limitations of this study and scope for further research

The researcher acknowledges some limitations in several aspects. Firstly, because of cross-sectional nature, this study is not conclusive in terms of its causality on the statistical relationship. Therefore, first limitation is in time horizon, where future studies may find different outcomes using longitudinal method. Observing the respondents' situation during their loan period which would take a year might provide more accurate results on causality. Whilst such an undertaking is beyond the scope of this research, future research may observe women's conditions time to time from the day they get access to credit from MFIs.

Secondly, this study has deployed women's household income to estimate the economic development of women after joining MFIs. Future studies may utilise women's own income which seems to be more robust. In terms of this, researchers can specifically investigate the number of women's own income to assess the impact. Regarding women's savings, this study

has considered savings from women's savings account with MFIs as an authentic source, however, women might save in other places concurrently. Therefore, researchers have further scope to include other sources of savings. It might provide different results to the current study.

Thirdly, samples of this research comprise women clients from only one district of Bangladesh. This study points out the lack of time and expenses for not approaching the clients of other districts. Future research may consider the expansion in this case. However, this research included significant number of samples. With respect to the data collection technique, quantitative method, specifically, questionnaire may not capture all their conditions related to empowerment in light of its subjective nature. Therefore, interview might be utilised to assess the extent of control over resources, agency of decision-making, their mobility and political participation.

Fourthly, this study was conducted from the perspective of clients, but it is also important to study the perception of MFIs' simultaneously to know about operational strategy and views. Studies might consider the viewpoint of MFIs to comprehend their mission and vision towards their clients. Most importantly, effectiveness of their products and services to change the clients' circumstances could be prioritised. Finally, this research has incorporated GB and BRAC as the representatives of MFIs industry in Bangladesh, however, other MFIs can be considered to assess their impacts on clients. Also, broader insight can be added through the comparative study such as comparison of Bangladesh with other microfinance operating countries. Thus, studies may shed the light on the similarities and variations of microfinance across different contexts.

References

- ADB (2018). Bangladesh: Economy. Asian Development Bank. Available at: <https://www.adb.org/countries/bangladesh/economy#tabs-0-> (Viewed on: 22/05/2018).
- Adjei, J.K., Arun T., & Hossain F. (2009). The role of microfinance in asset building and poverty reduction: The case of Sinapi Aba Trust of Ghana. Manchester: World Poverty Institute.
- Agbola F.W., Acupan A., & Mahmood, A. (2017). Does microfinance reduce poverty? New evidence from Northeastern Mindanao, the Philippines. *Journal of Rural Studies*, 50, pp. 159-171.
- Ahmed, M.S. (2009). Capability development among the ultra-poor in Bangladesh: A case study. *Journal of Health, Population and Nutrition*. 27(4), pp. 528-535.
- Ahmed, F., Brown, B., and Williams, S.P. (2013). Is it time to regulate microfinance? *Progress in Development Studies*, 13(3), pp. 209-220.
- Alderman, H.P., Chiappori, L., Haddad, J., Hoddinot, J., & Kanbur, R. (1995). Unitary versus collective models of the household: is it time to shift the burden of proof? *The World Bank Research Observer*, 10(1), pp. 1–19.
- Alexander, A.C., Bolzendahl, C., & Jalalzai F. (2016). Defining women's global political empowerment: Theories and evidence. *Sociology Compass*, 10(6), pp. 432-441.
- Al-Mamun, A., & Mazumder, M.N.H. (2015). Impact of microcredit on income, poverty, and economic vulnerability in Peninsular Malaysia. *Development in Practice*, 25(3), pp. 333-346.
- Angelucci, M., Karlan, D., & Zinman, J. (2015). Microcredit Impacts: Evidence from a randomized microcredit program placement experiment by Compartamos Banco. *American Economic Journal: Applied Economics*, 7(1), pp. 151–182.
- Armendariz, B., & Morduch, J. (2005). *The economics of microfinance*. Cambridge, MA: The MIT Press.
- Armendariz, B., & Morduch, J. (2010). *The economics of microfinance*. 2nd edition. Cambridge, MA: The MIT Press.
- Ashraf, N., Karlan, D., & Yin, W. (2010). Women empowerment: Impact of a commitment savings product in the Philippines. *World Development*, 38(3), pp. 333-344.

- Aterido, R., Beck, T., & Iacovone, L. (2013). Access to finance in Sub-Saharan Africa: Is there a gender gap? *World Development*, 47, pp. 102-120.
- Attanasio, O., Augsburg, B., Haas, R.D., Fitzsimons, E., & Harmgart, H. (2015). The Impacts of Microfinance: Evidence from Joint-Liability Lending in Mongolia. *American Economic Journal: Applied Economics*, 7(1), pp. 90-122.
- Audretsch, D.B., & Keilbach, M. (2004). Does entrepreneurship capital matter? *Entrepreneurship Theory and Practice*, 28(5), pp. 419–429.
- Augsburg, B., Haas, R.D., Harmgart, H., & Meghir, C. (2015). The impacts of microcredit: evidence from Bosnia and Herzegovina. *American Economic Journal: Applied Economics*, 7(1), pp. 183–203.
- Banerjee, S.B., & Jackson, L. (2017). Microfinance and the business of poverty reduction: Critical perspectives from rural Bangladesh, *Human Relations*, 70(1), pp. 63-91.
- Bangladesh Bank (2019). Current inflation. Available at: <https://www.bb.org.bd/econdata/inflation.php> (Viewed on: 16/01/2019).
- Bangladesh Economic Review (2017). Prices, wages and employment. Available at: http://mof.portal.gov.bd/sites/default/files/files/mof.portal.gov.bd/page/e8bc0eaa_463d_4cf9_b3be_26ab70a32a47/Ch-03%20%28English-2017%29_Final.pdf (Viewed on: 05/03/2018).
- Bangladesh Planning Commission (2016). 7th five year plan, FY2016-2020: Accelerating growth, empowering citizens. Available at: <http://www.plancomm.gov.bd/site/files/2eb8022b-d4fb-42e1-a67d-67bccabd8fe9/-> (Viewed on: 21/03/2019).
- Barro, R.J. (2015). Convergence and modernization. *The Economic Journal*, 125 (585), pp. 91-942.
- Baruch, Y. (1999). Response rates in academic studies- a comparative analysis, *Human Relations*, 52(4), pp. 421-438.
- Bateman, M., & Chang, H. (2012). Microfinance and the illusion of development: from hubris to nemesis in thirty years. *World Social and Economic Review*, 1, pp: 13-36.
- Batliwala, S. (1994). The meaning of women's empowerment: New concepts from action. In Sen, G., Germain A., & Chen L.C. (eds), *Population policies reconsidered: Health, empowerment and rights*. Boston: MA, Harvard Center for Population and Development Studies.

- Batliwala, S. (2007). Putting power back into empowerment. Open democracy. Available at: https://www.opendemocracy.net/en/putting_power_back_into_empowerment_0/ (Viewed on: 12/07/2016).
- Batliwala, S. (2007). Taking the power out of empowerment: An experiential account. *Development in Practice*, 17(4-5), pp. 557-565.
- Bayissa, F.W., Smits, J., & Ruben, R. (2018). The multidimensional nature of women's empowerment: Beyond the economic approach. *Journal of International Development*, 30(4), pp. 661-690.
- Bayulgen, B.O. (2008). Muhammad Yunus, Grameen Bank and the Nobel peace Prize: What political science can contribute to and learn from the study of microcredit. *International Studies Review*, 10(3), pp. 525-547.
- BBS (2017). Labour force survey 2016-2017. Available at: <https://www.ilo.org/surveydata/index.php/catalog/2047> (Viewed on: 20/04/2019).
- BBS (2016). Report on violence against women (VAW) survey (2015). Available at: <http://evaw-global-database.unwomen.org/-/media/files/un%20women/vaw/vaw%20survey/bangladesh%20vaw%20survey%202015.pdf?vs=2125> (viewed on: 21/03/2019).
- Becker, G.S. (1964). *Human Capital: A theoretical and empirical analysis, with special reference to education*. 3rd edition. Chicago: University of Chicago Press.
- Becker, G.S. (1981). *A treatise on the family*. Cambridge, MA: Harvard University Press.
- Bell, J. (2005) *Doing your research project*. 4th edition. Buckingham: Open University Press.
- Bin-human, Y. (2017). 5 challenges for women's financial inclusion. Available at: <http://www.cgap.org/blog/5-challenges-women%E2%80%99s-financial-inclusion> (Viewed on: 21/06/2017).
- Bleck, J., & Michelitch, K. (2018). Is women's empowerment associated with political knowledge and opinions? Evidence from rural Mali. *World Development*, 106, pp. 299-323.
- BRAC (2016). BRAC'S Microfinance program, Building Resources Across Communities. Available at: http://www.brac.net/microfinance#who_we_are (Viewed on: 15/11/2016).

- BRAC (2016). Building a world that works for all of us. Building Resources Across Communities. Available at: <http://www.brac.net/images/reports/2016/Bangladesh-Annual-Report-2016.pdf> (Viewed on: 23/01/2019).
- BRAC (2016). Microfinance program, Building Resources Across Communities. Available at: <http://www.brac.net/images/factsheet/june16/Microfinance-june16.pdf> (Viewed on: 05/10/2017).
- BRAC (2018). Micro insurance. Building Resources Across Communities. Available at: <http://www.brac.net/program/microfinance/microinsurance/> (Viewed on: 16/01/2018).
- BRAC (2018). Savings. Building Resources Across Communities. Available at: <http://www.brac.net/program/microfinance/savings/> (viewed on: 10/01/2018).
- Bryman, A. (2012). *Social Research Methods*. 4th edition. Oxford: Oxford University Press.
- Business Insider (2012). Hundreds of suicides in India to linked to microfinance Organizations. Available at: <https://www.businessinsider.com/hundreds-of-suicides-in-india-linked-to-microfinance-organizations-2012-2?r=US&IR=T> (Viewed on: 05/06/2016).
- Bylander, M. (2015). Credit as coping: Rethinking microcredit in the Cambodian context. *Oxford Development Studies*, 43(4), pp. 533–553.
- Carbo, S., Gardener, E.P.D., & Molyneux, P. (2007). Financial exclusion in Europe. *Public Money and Management*, 27(1), pp. 21-27.
- Caserta, M., Monteleone, S., & Reito, F. (2018). The trade-off between profitability and outreach in microfinance. *Economic Modelling*, 72, pp. 31-41.
- CDF (2018). Top 50 NGO-MFIs based on number of branches. Credit and Development Forum. Available at: http://www.cdfbd.org/new/page.php?scat_id=165 (Viewed on: 09/05/2019).
- CDF (2017). Bangladesh microfinance statistics 2016-2017. Credit and Development Forum. Available at: http://cdfbd.org/new/Bangladesh_Microfinance_Statistics_2016-17.pdf (Viewed On: 26/03/2019).
- Chemin, M. (2008). The benefits and costs of microfinance: Evidence from Bangladesh. *The Journal of Development Studies*, 44(4), pp. 463-484.

- Chen, M., & Mahmud, S. (1995). Assessing change in women's lives: A conceptual framework. Working paper, BRAC-ICDDR, B joint research project, Bangladesh. Available at, http://research.brac.net/workingpapers/Working_Paper_2.pdf (Viewed on: 12/02/2017).
- Chen M.A. (1991). *A quiet revolution: Women in transition in rural Bangladesh*. Cambridge, MA: Schenkman Publishing.
- Christen, R.P., Lyman, T.R., & Rosenberg, R. (2003). Microfinance consensus guidelines: Guiding principles on regulation and supervision of microfinance institutions. Washington, DC: CGAP.
- Churchill, S.A., & Marr, A. (2017). Sustainability and outreach: A comparative study of MFIs in South Asia and Latin America and Caribbean. *Bulletin of Economic Research*, 69(4), pp. 19-41.
- CIA (2017). The World Factbook, Central Intelligence Agency. Available at: <https://www.cia.gov/library/publications/the-world-factbook/geos/bg.html> (Viewed on: 27/02/2017).
- Collis, J., & Hussey, R. (2014). *Business Research: A practical guide for undergraduate and postgraduate students*. 4th edition. New York: Palgrave Macmillan.
- Conroy, J. (2005). APEC and financial exclusion: Missed opportunities for collective action? *Asia- Pacific Development Journal*, 12(1), pp. 53–79.
- Corsi, M., & De Angelis, M. (2017). Gender discrimination in Microfinance? Some evidence of Uganda. *The Journal of Development Studies*, 53(5), pp. 723-740.
- Corder, G.W., & Foreman, D.I. (2011). *Non-parametric statistics for non-statisticians: A step by step approach*. New Jersey: Wiley.
- D'espallier, B., Guerin I., & Mersland R (2013). Focus on women in microfinance institutions. *The Journal of Development Studies*, 49(5), pp. 589-608.
- D'espallier, B, Guerin, I., & Mersland R (2011). Women and repayment. A global analysis. *World Development*, 39(5), pp. 758–772.
- Daher, L., & Saout, E.L. (2017). Performance of listed microfinance institution. *Strategic change*, 26 (2), pp. 145-158.
- DCCI (2017). Major export commodities of Bangladesh, Dhaka Chamber of Commerce & Industry. Available at: https://www.dhakachamber.com/home/Major_Export_Items (Viewed on: 27/02/2017).

- Deininger, K., & Liu, Y. (2013). Economic and social impacts of an innovative self-help group model in India. *World Development*, 43(3), pp. 149 – 163.
- Demirguç-Kunt, A., Klapper, L.F., Singer, D., & Oudheusden, P.V. (2015). The global finindex database: measuring financial inclusion around the world. World Bank policy research working paper. Available at: <http://documents.worldbank.org/curated/en/187761468179367706/pdf/WPS7255.pdf> (Viewed on: 13/03/2019).
- Deshpande, R., Pickens, M., & Messan, H. (2006). Uganda- Country-level savings assessment CGAP savings initiative. Washington, D.C: World Bank. Available at: <http://documents.worldbank.org/curated/en/720391468346735711/Uganda-Country-level-savings-assessment-CGAP-savings-initiative> (Viewed on: 20/03/2018).
- De Vaus, D. (2014). *Surveys in social research*. 6th edition. London: Routledge.
- Dillman, D.A (2007). *Mail and internet surveys: The tailored design method*. 2nd edition. New Jersey: Wiley.
- Dowla, A. & Alamgir, D. (2003). From microcredit to microfinance: Evolution of savings products by MFIs in Bangladesh. *Journal of International Development*, 15(8), pp. 969-988.
- Dowla, A. (2006). In credit we trust: Building social capital by Grameen Bank in Bangladesh. *The Journal of Socio-Economics*, 35(1), pp. 102-122.
- Dufhues, T., Buchenrieder, G., Euler D.G., & Munkung N (2011). Network Based social capital and individual loan repayment performance. *Journal of Development Studies*, 47(8), pp. 1199-1215.
- Duflo, E. (2003). Grandmothers and granddaughters: Old-age pensions and intra-household allocation in South Africa. *The World Bank Economic Review*, 17(1), pp. 1–25.
- Dutta, A., & Banerjee, S. (2018). Does microfinance impede sustainable entrepreneurial initiatives among women borrowers? Evidence from rural Bangladesh. *Journal of Rural Studies*, 60, pp. 70-81.
- Duvendack, M., & Palmer-Jones, R. (2017). Micro-finance, women's empowerment and fertility decline in Bangladesh: How important was women's agency? *Journal of Development Studies*, 53(5), pp. 664-683.
- Elahi, K.Q., & Danopoulos, C.P (2004). Microcredit and the third world: Perspectives from moral and political philosophy, *International Journal of Social Economics*, 31(7), pp.643-654.

- Eriksson, P., & Kovalainen, A. (2008). *Qualitative methods in business research*. London: Sage.
- Estrin, S., Mickiewicz, T., & Stephen, U. (2016). Human capital in social and commercial entrepreneurship, *Journal of Business Venturing*, 31(4), pp. 449-467.
- Field, E., Pande, R., Papp, J., & Rigol, N. (2013). Does the classic microfinance model discourage entrepreneurship among the poor? Experimental evidence from India. *American Economic Review*, 103(6), pp. 2196-2226.
- Field, A. (2018). *Discovering Statistics using IBM SPSS statistics*. 5th edition. London: Sage.
- Fink, A. (2003). *The survey handbook*. 2nd edition. London: Sage.
- Fisher, R.A. (1922). On the interpretation of X^2 from contingency tables, and the calculation of P. *Journal of the Royal Statistical Society*, 85(1), pp. 87-94.
- Fletschner, D. (2009). Rural women's access to credit: market imperfections and intra-household dynamics. *World Development*, 37(3), pp. 618-31.
- Foddy, W. (1994). *Constructing questions for interviews and questionnaires: Theory and practice in social research*. Cambridge, UK: Cambridge University Press.
- Freire, P. (1970). *The Pedagogy of the Oppressed*. Translated by Myra Bergman Ramos: With an introduction by Donald Macedo. New York: Continuum.
- Gaiha R., & Nandhi, M.A. (2008). *Microfinance, self-help groups and empowerment in Maharashtra: The Indian economy sixty years after independence*. New York: Palgrave Macmillan.
- Ganle, J.K., Afriyie K.B., & Segebefia A.Y. (2015). Microcredit: Empowerment and disempowerment of rural women in Ghana. *World Development*, 66, pp. 335-345.
- Garikipati, S. (2008). The impact of lending to women on household vulnerability and women's empowerment: Evidence from India. *World Development*, 36(12), pp. 2620-2642.
- Garikipati, S., Agier, I., Guerin, I., & Szafarz, A. (2017). The cost of empowerment: multiple sources of women's debt in rural India. *The Journal of Development Studies*, 53(5), pp. 700-722.
- Ghosh, S., & Vinod, D. (2017). Constraints financial inclusion for women? Evidence from Indian micro data. *World Development*, 92, pp. 60-81.

- Gibbons, J.D. (1993). *Non-parametric statistics: An introduction*. London: Sage.
- Global Findex (2017). The unbanked. The global findex database 2017, World Bank. Available at: <https://globalfindex.worldbank.org/chapters/unbanked> (Viewed on: 07/02/2019).
- Godquin, M. (2002). Objective repayment rates in Bangladesh and other determinants: How to improve the efficiency of the attribution of loans by MFIs. Working paper, Universite Paris 1 Pantheon Sorbonne. Available at: https://www.researchgate.net/publication/228880666_Objective_repayment_rates_in_Bangladesh_and_their_determinants_How_to_improve_the_efficiency_of_the_attribution_of_loans_by_MFIs (Viewed on: 18/03/2019).
- Goetz, A.M., & Gupta R.S. (1996). Who takes the credit? Gender, power, and control over loan use in rural credit programs in Bangladesh. *World Development*, 24(1), pp. 45–63.
- Goldman, M.J., & Little, J.S. (2015). Innovative grassroots NGOS and the complex processes of women's empowerment: an empirical investigation from Northern Tanzania. *World Development*, 66, pp. 762-777.
- Gomez-Barroso, J.L., & Marban-Flores, R. (2014). Simple mobile banking: Learning from developing countries. *International Journal of Business Innovation and Research*, 8(5), pp. 485–497.
- Grameen Bank (2000). Annual report 2000, Available at: <http://www.grameen.com/wp-content/uploads/bsk-pdf-manager/GB-2000.pdf> (Viewed on, 03/05/2017).
- Grameen Bank (2001). Annual report 2001, Available at: <http://www.grameen.com/wp-content/uploads/bsk-pdf-manager/GB-2001.pdf> (Viewed on, 03/05/2017).
- Grameen Bank (2017). Annual report 2017. Dedicated to create a poverty free Bangladesh. Available at: <http://www.grameen.com/wp-content/uploads/bsk-pdf-manager/GB-2017.pdf> (Viewed on: 06/0/ 2019).
- Grameen Bank (2016). Annual report 2016. Celebrating 40 years of establishment, annual report. Available at: http://www.grameen.com/wp-content/uploads/bsk-pdf-manager/GB-AR-2016_34.pdf (Viewed on: 18/05/2018).
- Guba, E., & Lincoln, Y. S (1994). Competing paradigms in qualitative research. In Denzin N.K., & Lincoln Y.S (eds), *Handbook of qualitative research*. London: Sage.
- Hazarika, G., & Guha-Khasnobis, B. (2008). Household Access to Microcredit and Children's Food Security in Rural Malawi: A gender perspective. IZA discussion paper.

Institute of Labour Economics. Available at: <http://ftp.iza.org/dp3793.pdf> (Viewed on: 26/03/2018).

- Hair, J.F.J., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R. L. (2006). *Multivariate data analysis*. 6th edition. New Jersey: Pearson.
- Hashemi, S.M., Schuler, S.R., & Riley, A.P. (1996). Rural credit programs and women's empowerment in Bangladesh. *World Development*, 24(4), pp. 635–653.
- Helms, B. (2006) Access for all: Building inclusive financial systems. Washington DC, CGAP. Available at, <https://www.cgap.org/research/publication/access-all-building-inclusive-financial-systems> (Viewed on: 14/10/2019).
- Holovet, N. (2005), The Impact of microfinance on decision-making agency: Evidence from south Asia. *Development and change*, 36(1), pp. 75-102.
- Hultman, C.W. (1967). Exports and economic growth: A survey. *Land economics*, 43(2), pp. 148-157.
- Hulme, D., & Mosley, P. (1996). *Finance against poverty*, Volume: 2. London: Routledge.
- Hulme, D., Moore, K., & Barrientos, A. (2015). Assessing the insurance role of microsavings. In Islam, N., & Vos, R. (eds), *Financing for Overcoming Economic Insecurity*. London: Bloomsbury Academic.
- ILO (2018). Bangladesh: Population and labour force. Available at, https://www.ilo.org/ilostat/faces/oracle/webcenter/portalapp/pagehierarchy/Page21.jspx?_afLoop=3023822155777532&_afWindowMode=0&_afWindowId=15wxseo4o6_108#!%40%40%3F_afWindowId%3D15wxseo4o6_108%26_afLoop%3D3023822155777532%26_afWindowMode%3D0%26_adf.ctrl-state%3D15wxseo4o6_120 (Viewed on: 22/04/2019).
- Imai, K.S., Gaiha, R., Thapa, G., & Ananim, S. K (2012). Microfinance and poverty-A macro perspective. *World Development*, 40(8), pp. 1675-1689.
- IMF (2018). World economic outlook database, October, 2017. International Monetary Fund. Available at: <https://www.imf.org/external/index.htm> (Viewed on: 01/03/2019).
- Issac, S., & Michael, W.B. (1995). *Handbook in research and evaluation: For education and behavioural sciences*. 3rd edition. San Diego, EdITS.
- Johnson, S., & Rogaly, B. (1997). *Microfinance and Poverty Reduction*. London: Oxfam.

- Johnson, P., & Clark, M. (2006). *Mapping the terrain: An overview of business and management research methodologies*. In Johnson, P., & Clark M. (eds), *Business and management research methodologies*. London: Sage.
- Junquera, B. (2011). Where does women entrepreneurial human capital come from? A review of the literature, *Innovation: Management. Policy and Practice*, 13(3), pp. 391–411.
- Kabeer, N. (1994). *Reversed Realities: Gender Hierarchies in development thought*. London: Verso.
- Kabeer, N. (1997). Women, wages and intra-household power relations in urban Bangladesh. *Development and Change*. 28(2), pp. 261-302.
- Kabeer, N. (1998). Education is my daughter's future. *Index of censorship*, 27(3), pp. 154-160.
- Kabeer, N. (1998). Money can't buy me love? Re-evaluating gender, credit and empowerment in rural Bangladesh. IDS Discussion Paper. Institution of Development Studies. Available at: <https://opendocs.ids.ac.uk/opendocs/handle/123456789/13879> (Viewed on: 19/02/2018).
- Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change*, 30 (3), pp. 435–464.
- Kabeer, N. (2001). Conflicts over credit: Re-evaluating the empowerment potential of loans to women in rural Bangladesh. *World Development*, 29 (1), pp. 63-84.
- Kabeer, N. (2008). Paid work, women's empowerment and gender justice: Critical pathways of social change. Department for International Development. Available at: <https://www.gov.uk/dfid-research-outputs/pathways-working-paper-3-paid-work-women-s-empowerment-and-gender-justice-critical-pathways-of-social-change> (Viewed on: 25/12/2016).
- Kabeer, N. (2011). Between affiliation and autonomy: Navigating pathways of women's empowerment and gender justice in rural Bangladesh. *Development and Change*, 42(2), pp: 499–528.
- Kabeer, N. (2017). Economic pathways to women's empowerment and active citizenship: What does the evidence from Bangladesh tell us? *The Journal of Development Studies*, 53(5), pp. 649-663.

- Kabeer, N., Mahmud, S., & Castro, J.G.I. (2012). NGOs and the political empowerment of poor people in rural Bangladesh: Cultivating the habits of democracy? *World Development*, 40(10), pp. 2044-2062.
- Kalnins, A., & Williams, M. (2014). When do women-owned businesses out-survive male-owned businesses? A disaggregated approach by industry and geography. *Journal of Business Venturing*, 29(6), pp. 822–835.
- Karl, T.L. (2000). Economic inequality and democratic instability. *Journal of Democracy*, 11(1), pp. 149-156
- Karlan, D., & Zinman, J. (2011). Microcredit in Theory and Practice: Using Randomized Credit Scoring for impact Evaluation. *Science*, 332(6035), pp. 1278-1284.
- Karlan, D., Ratan, A.L., & Zinman, J. (2014). Savings by and for the poor: A research review and agenda. *Review of Income and Wealth*, 60(1), pp. 36-78.
- Karlan, D., & Valdivia, M. (2009). Teaching entrepreneurship: impact of business training on microfinance clients and institutions. *The Review of Economics and Statistics*, 93(2), pp. 510–527.
- Kevane, M., & Wydick, B. (2001). Microenterprise lending to women entrepreneurs: Sacrificing economic growth for poverty alleviation? *World Development*, 29(7), pp.1225–1236.
- Khan, R. E. A., & Noree, S. (2012). Microfinance and women empowerment: A case study of District Bahawalpur (Pakistan). *African Journal of Business Management*, 6(12), pp. 4514–4521.
- Khan, W., Sharong, S., & Ullah, I. (2017). Doing business with the poor: the rules and impact of the microfinance institutions. *Economic Research-Ekonomska Istrazivanja*, 30(1), pp. 951-963.
- Khandker, S.R. (2005). Microfinance and poverty: Evidence using panel data from Bangladesh. *The World Bank Economic Review*, 19(2), pp. 263-286.
- Kishore, S. (2000). Empowerment of women in Egypt and links to the survival and health of their infants. In Presser, H., & Sen, G. (eds), *Women's empowerment and demographic processes: Moving beyond Cairo*. New York: Oxford University Press.
- Kishor, S., & Subaiya, L. (2008). Understanding women's empowerment. A comparative analysis of demographic and health surveys (DHS) data. DHS comparative report. Available at: <https://dhsprogram.com/publications/publication-cr20-comparative-reports.cfm> (Viewed on: 20/03/2018).

- Klapper, L., & Parker, S. (2011). Gender and the business environment for new firm creation. *The World Bank Research Observer*, 26(2), pp. 237–257.
- Kumar, N., Raghunathan, K., Arrieta, A., Jilani, A., Chakrabarti, S., Menon, P., & Quisumbing, A. (2019). Social networks, mobility, and political participation: The potential for women's self-help groups to improve access and use of public entitlement schemes in India. *World Development*, 114, pp. 28–41.
- Lai, G., & Wong, O. (2002). The tie effect on information dissemination: The spread of a commercial rumour in Hong Kong. *Social Networks*, 24(1), pp. 49–75.
- Larance, L. (1998). Fostering social capital through NGO design: Grameen Bank membership in Bangladesh. *International Social Work*, 44(1), pp. 7-18.
- Larson-Hall, J., & Plonsky, L. (2015). Reporting and interpreting quantitative research findings: What gets reported and recommendations for the field. *Language Learning*, 65(1), pp. 127-159.
- Ledgerwood, J. (1999). *Microfinance handbook: An institutional and financial perspective*. Washington, D.C: World Bank.
- Lewis, D. (2011). *Bangladesh, Politics, Economy and Civil Society*. Cambridge, UK: Cambridge University Press.
- Lewis, D., & Sobhan, B. (1999). Routes of funding, roots of trust? Northern NGOs, Southern NGOs, donors and the rise of direct funding. *Development in Practice*, 9(1-2), pp. 117–129.
- Leyshon, A., & Thrift, N. (1995). Geographies of financial exclusion: financial abandonment in Britain and the United States. *Transactions of the Institute of British Geographers*, 20(3), pp. 312–341.
- Lindsey, J.K. (1999). On the use of corrections for over-dispersion. *Applied Statistics*, 48(4), pp. 553-561.
- Lin, N. (1981). *Social resources and instrumental action*. New York: State University of New York.
- Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic inquiry*. London: Sage.
- Loewe, M., & Rippin, N. (2015). The sustainable development goals of the post-2015 Agenda: Comments on the OWG and SDSN proposals, German Development Institute. Available at: <https://www.die->

- Lomax, R.G., & Hahs-Vaughn D.L. (2012). *Statistical concepts: A Second course*. 4th edition. New York: Routledge.
- Lopatta, K., & Tchikov, M. (2016). Do microfinance institutions fulfil their promise? Evidence from cross-country data. *Applied Economics*, 48(18), pp. 1655-1677.
- Lopatta, K., Tchikov, M., Jaeschke, R., & Lodhia, S. (2017). Sustainable development and microfinance: The effect of outreach and profitability on microfinance institutions' development mission. *Sustainable Development*, 25(5), pp. 386-399.
- Lovell, C.H. (1992). *Breaking the cycle of poverty: The BRAC strategy*. Connecticut: Kumarian Press.
- Maclean, K. (2010). Capitalizing on women's social capital? Women-targeted microfinance in Bolivia. *Development and Change*, 41(3), pp. 495–515.
- Madsen, H., Neergaard, H., & Ulhøi, J.P. (2003). Knowledge-intensive entrepreneurship and human capital. *Journal of Small Business and Enterprise Development*, 10(4), pp. 426–434.
- Mahmud, S. (2003). Actually how empowering is microcredit? *Development and Change*, 34(4), pp. 577-605.
- Mahmud, S., Shah, N.M., & Becker, S. (2012). Measurement of women's empowerment in rural Bangladesh. *World Development*, 40(3), pp. 610–619.
- Malhotra, A., & Schuler, S.R. (2005) Women's empowerment as a variable in international development. In Narayan, D. (ed.), *Measuring empowerment: cross-disciplinary perspectives*, Washington, DC: World Bank.
- Malhotra, A., Schuler, S.R., & Boender, C. (2002). *Measuring women's Empowerment as a variable in international development*. World Bank social development group. Available at:
<http://siteresources.worldbank.org/INTEMPowerment/Resources/486312-1095970750368/529763-1095970803335/malhotra.pdf> (Viewed on: 13/01/2017).
- Matin, N., & Taher, M. (2001). The changing emphasis of disasters in Bangladesh NGOs. *Disasters*, 25(3), pp. 227–239.
- Matin, I., & Hulme, D. (2003). Programs for the Poorest: Learning from the IGVGD Program in Bangladesh. *World Development*, 31(3), pp. 647-665.

- Maxwell, S.E., & Delaney, H.D. (2004). *Designing experiments and analysing data: A model comparison perspective*. 2nd edition. New York: Psychology press.
- Mayoux, L. (2000). Micro-finance and the empowerment of women, a review of the key issues. Social finance working paper, International Labour Organization. Available at: https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_117993.pdf (Viewed on: 12/02/2016).
- Mayoux, L. (2006). Women's empowerment through sustainable micro-finance: rethinking 'Best Practice'. Available at: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.121.2948&rep=rep1&type=pdf> (Viewed on: 24/07/ 2018).
- Mazumder, M.S.U., & Lu, W. (2015). What impact does microfinance have on rural livelihood? A comparison of governmental and non-governmental microfinance programs in Bangladesh. *World Development*, 68, pp. 336-354.
- McElroy M.B., & Horney M.J. (1981). Nash-bargained household decisions: toward a generalisation of the theory of demand. *International Economic Review*, 22(2). pp. 330-350.
- McGregor, A. (1989). Towards a better understanding of credit in rural development. The case of Bangladesh: the patron state. *Journal of International Development*, 1(4), pp. 467-486.
- McGuire, P.B., Conroy, J.D & Thapa, G.B. (1998). Getting the framework right: policy and regulation for microfinance in Asia. Brisbane: Foundation for Development Cooperation.
- McNabb, D.E. (2015). *Research methods in public administration and non-profit management: Quantitative and qualitative approaches*. 3rd edition. London: Routledge.
- Menon, N., & Rodgers, Y.V.M. (2011). How Access to Credit Affects Self-employment: Differences by Gender during India's Rural Banking Reform, *The Journal of Development Studies*, 47(1), pp. 48-69.
- Mersland, R., & Strom, R. O. (2010). Microfinance mission drift? *World Development*, 38(1), pp. 28-36.
- Mia, M.A., Lee, H., Chandran, V.G.R., Rasiah, R., & Rahman, M. (2017). History of microfinance in Bangladesh: A life cycle theory approach, *Business History*. pp. 1-31.
- Microfinance Barometer (2018). Microfinance and profitabilities. Available at: http://www.convergences.org/wp-content/uploads/2018/09/BMF_2018_EN_VFINALE-1.pdf (Viewed on: 10/01/2019).

- Mishra, K., & Sam, A.G. (2016). Does women's land ownership promote their empowerment? Empirical evidence from Nepal. *World Development*, 78, pp. 360-371.
- Mixmarket (2017). Bangladesh market overview. Available at: <https://www.themix.org/mixmarket/countries-regions/bangladesh> (Viewed on: 10/03/2017).
- MKNelly, B., & Dunford, C. (1999). Impact of credit with education on mothers and their young children's nutrition: Crecer credit with education program in Bolivia. Available at: <https://www.findevgateway.org/sites/default/files/mfg-en-paper-impact-of-credit-with-education-on-mothers-and-their-young-childrens-nutrition-crecer-credit-with-education-program-in-bolivia-1999.pdf> (Viewed on: 23/09/2019).
- Moore, M., & Putzel, J. (1999). Politics and poverty: A background paper for the world development report 2000/1. Available at: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.197.9571&rep=rep1&type=pdf> (Viewed on: 15/01/2018).
- Morduch, J. (1999). The microfinance promise. *Journal of Economic Literature*. 37(4), pp. 1569–614.
- Moro, A., Wisniewski, T.P., & Mantovani, G.M. (2017). Does a manager's gender matter when accessing credit? Evidence from European data. *Journal of Banking and Finance*, 80, pp. 119-134.
- Moser, C.O.N. (1989). Gender planning in the third world: Meeting practical and strategic gender need. *World Development*, 17(11), pp. 1799-1825.
- MRA (2017). List of licensed MFIs. Microcredit Regulatory Authority. Available at: http://www.mra.gov.bd/images/Licensed_NGO_MFIs/lic160517en.pdf (Viewed on: 28/06/2017).
- Mull, K.R. (2016). The pitfalls of the microfinance promise. *Global Tides*, 10(9), pp. 1–11.
- Murshid, N.S., & Ely, G.E (2016). Microfinance participation and contraceptive decision-making: Results from a national sample of women in Bangladesh. *Public Health*, 139, pp, 141-147.
- Murshid, N.S., & Ball, A. (2018). Examining women's physical mobility and microfinance participation in Bangladesh: Results from a nationally representative sample. *Women Studies International Forum*, 69, pp. 33-39.
- Narain, S. (2009). Gender and access to finance. Analytical paper, World Bank. Available at: <http://siteresources.worldbank.org/EXTGENDERSTATS/Resources/SushmaNarain-AccesstoFinanceAnalyticalPaper.doc> (Viewed on: 14/03/2018).

- Narayan, D. (2005). Conceptual framework and methodological challenges. In Narayan, D. (ed.), *Measuring empowerment: Cross-disciplinary perspectives*. Washington, DC: World Bank.
- Neuman, W.L. (2005). *Social research methods*. 6th edition. London: Pearson.
- Ngo, M.T., & Wahhaj, Z. (2012). Microfinance and gender empowerment. *Journal of Development Economics*, 99(1), pp. 1-12.
- OECD (2008). Gender and sustainable development: maximizing the economic, social and environmental role of women, A Report to the United Nations Commission on Sustainable Development (UNCSD), Organization for Economic Cooperation and Development. Available at: <https://www.oecd.org/social/40881538.pdf> (Viewed on: 11/02/2018).
- Osmani, L.N.K. (2007). A breakthrough in women's bargaining power: The impact of microcredit. *Journal of International Development*. 19(5), pp. 695-716.
- Oxfam (2017). Why the majority of the world's poor are women. Oxford Committee for Famine Relief. Available at: <https://www.oxfam.org/en/even-it/why-majority-worlds-poor-are-women> (Viewed on: 28/06/2017).
- Painter, J., & McNelly, B. (1999). Village banking dynamics study: evidence from seven programs. *Journal of Microfinance*, 1(1), 91-116.
- Panday, P., & Li, L.C. (2014). Women's political participation in Bangladesh: Role of women's organizations. *International Journal of Public Administration*. 37(11), pp. 724-736.
- Parker, J., & Pearce, D. (2002). Microfinance, grants, and non-financial responses to poverty reduction: where does microcredit fit? FocusNote, The Consultative Group to Assist the Poor. Available at: <https://www.cgap.org/research/publication/microfinance-grants-and-non-financial-responses-poverty-reduction> (Viewed on: 26/03/2017).
- Parpart, J.L., Rai, S., & Staudt, K. A., (eds). (2002). *Rethinking empowerment: Gender and development in a global/local world*. London: Routledge.
- Paxton, J. (1995). Sustainable banking with the poor: A worldwide inventory of microfinance institutions. World Bank. Available at: <https://www.findevgateway.org/sites/default/files/mfg-en-paper-sustainable-banking-with-the-poor-a-worldwide-inventory-of-microfinance-institutions-2001.pdf> (Viewed on: 14/07/2018).

- Pearson, K. (1900). On the criterion that a given system of deviations from the probable in the case of a correlated system of variable is such that it can be reasonably supposed to have arisen from random sampling. *Philosophical Magazine*, 50(5), pp. 157-175.
- Pirolo, L., & Presutti, M. (2010). The impact of social capital on the start-up performance growth. *Journal of Small Business Management*, 48(2), pp. 197–227.
- Pisani, M.J., & Yoskowitz, D.W. (2005). In God we trust: A qualitative study of church-sponsored microfinance at the margins in Nicaragua. *Journal of Microfinance*, 7(2), pp. 1-41.
- Pitt, M.M., & Khandker, S. (1998). The impact of group-based credit programs on poor households in Bangladesh: Does the gender of participants matter? *The Journal of Political Economy*, 106(5), pp. 958–997.
- Pitt, M.M., Khandker, S.R., Cartwright, J. (2006). Empowering women with microfinance: evidence from Bangladesh. *Economic Development and Cultural Change*, 54(4), pp. 791–831.
- Pitt, M.M., Khandker, S.R., Chowdhury, O.H., & Millimet, D.L. (2003). Credit program for the poor and health status for the children in rural Bangladesh. *International Economic Review*, 44(1), pp. 87–118.
- POWG (2006). Microfinance and non-financial services for very poor people: digging deeper to find keys to success. The SEEP network. Poverty Outreach Working Group. Available at: <https://www.findevgateway.org/sites/default/files/mfg-en-paper-microfinance-and-non-financial-services-for-very-poor-people-digging-deeper-to-find-keys-to-success-oct-2006.pdf> (Viewed on: 27/03/2019).
- PWC (2017). The long view: how will the global economic order change by 2050? Pricewaterhousecoopers. Available at: <https://www.pwc.com/gx/en/world-2050/assets/pwc-world-in-2050-summary-report-feb-2017.pdf> (Viewed on: 30/05/2017).
- Rahman, A. (1999). *Women and microcredit in rural Bangladesh: anthropological study of the rhetoric and realities of Grameen Bank lending*. Boulder: Westview Press.
- Rahman, S. (2006). Democracy, democracy and the NGO sector: Theory and evidence from Bangladesh. *Journal of Developing Society*, 22 (4), pp. 451-473.
- Raihan, S., Osman, S.R., & Khalily M.A.B. (2017). The macro impact of microfinance in Bangladesh: A CGE analysis. *Economic Modelling*, 62, pp. 1-15.
- Raihan, S., Osman, S.R., & Khalily M.A.B. (2015). Contribution of microfinance to the Gross Domestic Product (GDP) of Bangladesh. Working paper. Available at:

<http://inm.org.bd/wp-content/uploads/2016/01/Workingpaper44.pdf> (Viewed on: 09/05/2019).

- Rankin, K. (2002). Social capital, microfinance, and the politics of development. *Feminist Economics*, 8(1), pp.1–24.
- Rao, P.S.Y., & Priyadarshini, Y.J. (2013). Credit options to the rural poor: Microfinance as a source of rural credit in India. *International Journal of Management and Social Sciences Research*, 2(3), pp. 8-21.
- Rea, L.M., & Parker, R.A. (2012). *Designing and conductive survey research: A comprehensive guide*. San Francisco: Wiley.
- RED (2017). An assessment of flash flood'17 impact in *Haor* areas of Bangladesh. The research and Evaluation Department, BRAC, Bangladesh.
- Remenyi, D., Williams, B., Money, A., & Swartz, E. (1998). *Doing research in Business and management: An introduction to process and method*. London: Sage.
- Robson, C. (2002). *Real world research*. 2nd edition. Oxford: Blackwell publishing.
- Rogaly, B. (1996). Micro-finance evangelism, 'destitute women', and the hard selling of a new anti-poverty formula. *Development in Practice*, 6(2), pp.100-112.
- Rooyen, C.V., Stewart, R., & Wet, T.D. (2012). The impact of microfinance in Sub-Saharan Africa: A systematic review of the evidence. *World Development*, 40(11), pp. 2249–2262.
- Rowlands, J. (1998). A word of the times, but what does it mean? Empowerment in the discourse and practice of development. In Afshar, H. (ed), *Women and empowerment: Illustrations from the third world*. London: Palgrave Macmillan.
- Rutherford, S. (2000). *The poor and their money*. Oxford: Oxford University Press.
- Rutherford, S. (2003). Money talks: Conversations with poor households in Bangladesh about managing money. *Journal of Microfinance*, 5(2), pp. 43-75.
- Samarakoon, S., & Parinduri, R.A. (2015). Does education empower women? Evidence from Indonesia. *World Development*, 66, pp. 428-442.
- Sanders, J.M., & Nee, V. (1996). Immigrant self-employment: the family as social capital and the value of human capital. *American Sociological Review*, 61(2), pp. 231–249.

- Sanyal, P. (2009). From credit to collective action: The role of microfinance in promoting women's social capital and normative influence. *American Sociological Review*, 74(4), pp. 529–550.
- Saunders, M., Lewis, P., & Thornhill, A. (2016). *Research methods for business students*. 7th edition. Harlow: Pearson Education.
- Schuler, S.R., Hashemi, S.M., & Badal, S.H. (1998). Men's violence against women in rural Bangladesh: Undermined or exacerbated by microcredit programmes? *Development in Practice*, 8(2), pp. 148-157.
- Schuler, S.R., Islam, F., & Rottach, E. (2010) Women's empowerment revisited: A case study from Bangladesh. *Development in practice*, 20(7), pp. 840-854.
- Schuler, S.R., Hashemi, S.M., & Riley, A.P. (1996). The influence of women's changing roles and status in Bangladesh's fertility transition: Evidence from a study of credit programs and contraceptive use. *World Development*, 25(4), pp. 563–576.
- Schumpeter, J.A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. Cambridge, MA: Harvard University Press.
- Scott, S.C., Goldberg, M.S., & Mayo, N.E. (1997). Statistical assessment of ordinal outcomes in comparative studies. *Journal of Clinical Epidemiology*, 50(1), pp. 45-55.
- Sebstad, J., Neill, C., Barnes, C., & Chen, G. (1995). Assessing the impacts of microenterprise interventions: A framework for analysis. USAID-AIMS Paper. Washington, DC. Available at: <https://www.findevgateway.org/library/assessing-impacts-microenterprise-interventions-framework-analysis> (Viewed on: 25/09/2019).
- Seibel, H.D. (2003). History matters in microfinance, working paper. Development Research Center, University of Cologne. Available at: https://www.econstor.eu/bitstream/10419/23549/1/2003-5_History_matters.pdf (Viewed on: 18/05/2018).
- Sen, A.K. (1997). Human capital and human capability. *World Development*, 25(12), pp.1959-1961.
- Sen, A.K. (1993). Capability and well-being. In Nussbaum, M., & Sen, A. (eds), *The quality of life*. Oxford: Clarendon Press.
- Sen, G. (1997). Empowerment as an approach to poverty. Human development report, poverty and human development. New York: UNDP/Oxford University Press.

- Shamsuddin, M. (2015). Labour market effects of a women stipend programme in Bangladesh. *Oxford Development Studies*, 43(4), pp. 425-447.
- Smith, D.E. (ed.) (2006). *Institutional Ethnography as Practice*, Lanham: Rowman and Littlefield.
- Srnec, K., & Svobodova, E. (2009). Microfinance in less developed countries: History, progress, present- charity or business? *Agricultural economics- Czech*, 55 (10), pp. 467-474.
- Sundstrom, A., Paxton, P., Wang Y.T., & Lindberg, S.I. (2017). Women's political empowerment: A new global index, 1900–2012. *World Development*, 94, pp. 321–335.
- Stewart, R., Rooyen, C.V., Korth, M., Chereni, A., Da Silva, N.R., & De Wet, T. (2012). Do micro-credit, micro-savings and micro-leasing serve as effective financial inclusion interventions enabling poor people, and especially women, to engage in meaningful economic opportunities in low- and middle-income countries? A systematic review of the evidence. EPPI-Centre, Social Science Research Unit, Institute of Education, University of London, UK.
- Swain, B.R., & Wallentin, F.Y. (2009). Does microfinance empower women? Evidence from self-help groups in India. *International Review of Applied Economics*, 23(5), pp. 541–556.
- Swain, R.B., & Wallentin, F.Y. (2017). The impact of microfinance on factors empowering women: differences in regional and delivery mechanisms in India's SHG programme. *The Journal of Development Studies*, 53(5), pp. 684-699.
- Swamy, V. (2014). Financial inclusion, gender dimension, and economic impact on poor households. *World Development*, 56, pp.1–15.
- Tabachnick, B.G., & Fidell, L.S. (2014). *Using multivariate statistics*. 6th edition. Boston, MA: Pearson.
- Taylor, G., & Pereznieto, P. (2014). Review of evaluation approaches and methods used by interventions on women and girls. Overseas Development Institute. Available at: <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8843.pdf> (Viewed on: 14/03/2018).
- Rika, T., Zainalabidin, M., Jarir, H.H.J (2015). Effectiveness of microcredit program and determinants of income among small business entrepreneurs in Malaysia. *Journal of Global Entrepreneurship Research*. 5(22), pp. 1-14.

- Thornton, P., Devine, J., Houtzager, P., Wright, D., & Rozario, S. (2000). Partners in development: A review of big NGOs in Bangladesh. Report for DFID, Bangladesh.
- Todd, H. (1995). *Women at the centre: Grameen Bank borrowers ten years on*. Malaysia: Cashpor.
- Tutz, G. (2012). *Regression for categorical data*. Cambridge, UK: Cambridge University Press.
- The daily star (2018). New apparel wage comes into effect next month. Available at: <https://www.thedailystar.net/business/bangladesh-garment-workers-minimum-wage-comes-into-effect-next-month-1665610> (Viewed on: 19/01/2019).
- UN General Assembly, *United nations Millennium Declaration*, 18 September, 2000, A/RES/55/2. Available at: <http://www.un.org/millennium/declaration/ares552e.pdf> (Viewed on: 05/01/2019).
- UN General Assembly, *Transforming our World: the 2030 Agenda for Sustainable Development*, 21 October 2015, A/RES/70/1. Available at: <https://www.refworld.org/docid/57b6e3e44.html> (Viewed on: 05/01/2019).
- UN Women (2014). World survey on the role of women in development 2014: Gender equality and sustainable development. United Nations Entity for Gender Equality and Empowerment of Women. Available at: <http://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2014/world-survey-on-the-role-of-women-in-development-2014-en.pdf?la=en&vs=3045> (Viewed on: 14/03/2019).
- UN Women (2015). Women and sustainable development goals. United Nations Entity for Gender Equality and Empowerment of Women. Available at: <https://sustainabledevelopment.un.org/content/documents/2322UN%20Women%20Analysis%20on%20Women%20and%20SDGs.pdf> (Viewed on: 13/06/2018).
- UN (2018). Progress towards the sustainable development goals: Report of the Secretary-General. United Nations. Available at: <https://digitallibrary.un.org/record/1627573?ln=en> (Viewed on: 14/05/2019).
- UNESCO (2018). Education and literacy. The United Nations Educational, Scientific and Cultural Organizations. Available at: <http://uis.unesco.org/country/BD> (Viewed on: 22/04/2019).

- Vonderlack, R.M., & Schreiner, M. (2002). Women, microfinance, and savings: Lessons and proposals. *Development in Practice*, 12(5), 602-612.
- Weber, O., & Ahmad, A. (2014). Empowerment through microfinance: The relation between loan cycle and level of empowerment. *World Development*, 62, pp. 75–87.
- Wellalage, N., & Locke, S. (2017). Access to credit by SMEs in South Asia: Do women entrepreneurs face discrimination. *Research in International Business and Finance*, 41, pp. 336-346.
- Wellman, B., & Wortley, S. (1990). Different strokes from different folks: Community ties and social support. *American Journal of Sociology*, 96(3), pp. 558–588.
- Weaver, K.W., Morales, V.C., Dunn, S.L., Godde, K., & Weaver, P.F. (2018). *An introduction to statistical analysis in research: With applications in the biological and life sciences*. New Jersey, Wiley.
- White, S.C. (1991). Evaluating the impact of NGOs in rural poverty alleviation: Bangladesh Country Study, working paper, Overseas Development Institute. Available at: <https://www.odi.org/publications/5575-evaluating-impact-non-governmental-organisations-ngos-rural-and-poverty-alleviation-bangladesh> (Viewed on: 18/07/2018).
- Woolcock, M., & Narayan, D. (2000). Social capital: Implications for development theory, research and policy. *The World Bank Research Observer*, 15(2), pp. 225-249.
- World Bank (2008). Finance for all? Policies and pitfalls in expanding access. Policy research report. Available at: https://siteresources.worldbank.org/INTFINFORALL/Resources/4099583-1194373512632/FFA_book.pdf (Viewed on: 14/03/2018).
- World Bank (2016). Country profile. Available at: http://databank.worldbank.org/data/views/reports/reportwidget.aspx?Report_Name=CountryProfile&Id=b450fd57&tbar=y&dd=y&inf=n&zm=n&country=BGD (Viewed on: 22/05/2018)
- World Bank (2016). Financial inclusion. Available at: <http://www.worldbank.org/en/topic/financialinclusion/overview> (Viewed on: 28/02/2017).
- World Bank (2016). Population density (people per sq. km of land area). Available at: <http://data.worldbank.org/indicator/EN.POP.DNST?end=2015&locations=BD&start=1961&view=chart&year=2015> (Viewed on: 01/03/2017).
- World Bank (2017). In Bangladesh, empowering and employing women in the garments sector. Available at: <http://www.worldbank.org/en/news/feature/2017/02/07/in-bangladesh-empowering-and-employing-women-in-the-garments-sector> (Viewed on: 24/05/2018).

- World Bank (2017). Bangladesh continues to reduce poverty but at slower pace. Available at: <http://www.worldbank.org/en/news/feature/2017/10/24/bangladesh-continues-to-reduce-poverty-but-at-slower-pace> (Viewed on: 22/05/2018).
- World Bank (2017). Bangladesh development update: Towards more, better and inclusive jobs. Available at: <http://documents.worldbank.org/curated/en/710651506517681504/pdf/120089-WP-PUBLIC-BDU-September-27-2017.pdf> (Viewed on: 14/02/2019).
- World Bank (2017). Migration and remittances, recent developments and outlook. Migration and development brief. Available at: <https://openknowledge.worldbank.org/bitstream/handle/10986/28444/120240-WP-PUBLIC-3-10-2017-22-22-41-MigrationandDevelopmentBrief.pdf?sequence=1&isAllowed=y> (Viewed on: 07/01/2019).
- World Bank (2018). School enrolment, tertiary, women (% gross), Bangladesh. Available at: <https://data.worldbank.org/indicator/SE.TER.ENRR.FE?locations=BD&view=chart> (Viewed on: 05/05/2018).
- World Bank (2018). School enrolment, primary, women (% net), Bangladesh. Available at: <https://data.worldbank.org/indicator/SE.PRM.NENR.FE?locations=BD> (Viewed on: 05/05/2018).
- World Bank (2018). School enrolment, secondary, women (% net), Bangladesh. Available at: <https://data.worldbank.org/indicator/SE.SEC.NENR.FE?locations=BD&view=chart> (Viewed on: 05/05/2018).
- World Bank (2019). Bangladesh GDP. Available at: <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=BD> (Viewed on: 13/01/2019).
- World Bank (2019). Population, women (% of total). Available at: <https://data.worldbank.org/indicator/SP.POP.TOTL.FE.ZS?locations=BD> (Viewed on: 16/01/2019).
- World Bank (2019). Population, women. Available at: <https://data.worldbank.org/indicator/SP.POP.TOTL.FE.IN?end=2017&start=1960&view=chart> (Viewed on: 06/01/2019).
- Yount, K.M., Crandall, A., & Cheong, Y.F. (2018). Women's age at first marriage and long-term economic empowerment in Egypt. *World Development*, 102, pp.124–134.

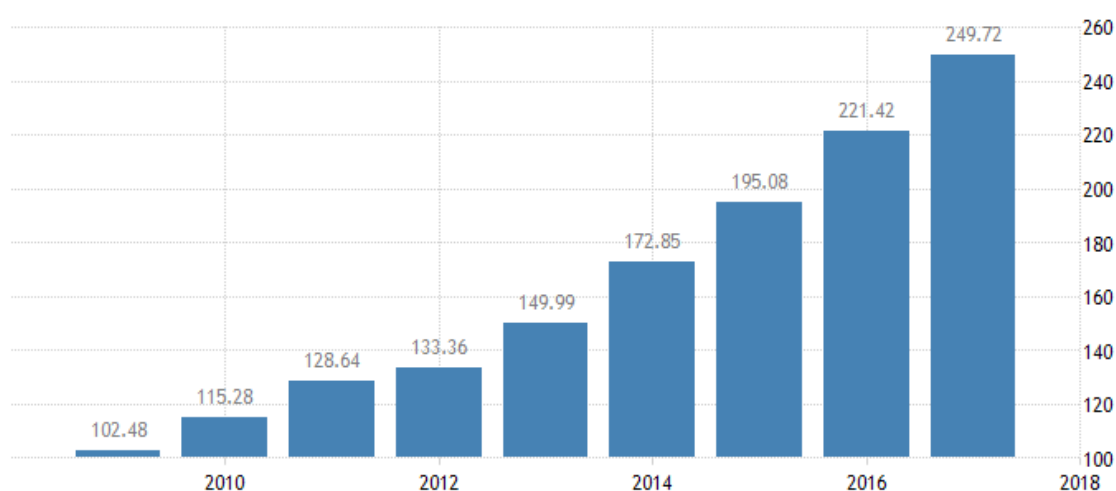
- Yunus, M. (2003) *Banker to the poor: Micro-lending and the battle against world poverty*. New York, USA: Public Affairs.

Appendices

Appendix A: Descriptive statistics, bivariate analysis and Kruskal-Wallis test

Appendix 1

Figure 2.1: Economic growth measured by GDP growth (2006-2016).



Source: World Bank, (2018).

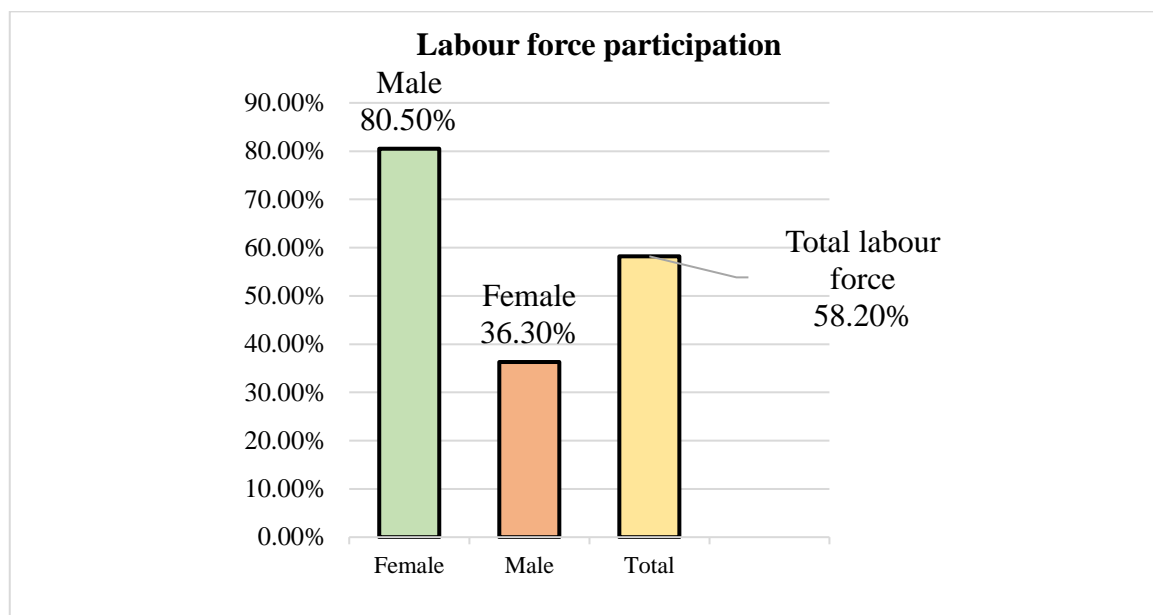
Appendix 2

Table 2.9 Export commodities of Bangladesh

Primary commodities	Agricultural commodities	Industrial commodities
Frozen food	Tea	Garments
Frozen fish	Vegetables	cement
Shrimps	Tobacco	Salt
	Cut flower and foliage	Stone
	Fruits	Pharmaceuticals
	Spices	Leather
	Dry food	paper
		Handicrafts
		Silk
		Cosmetics
		Plastic waste
		Rubber
		Printed materials
		Pulp

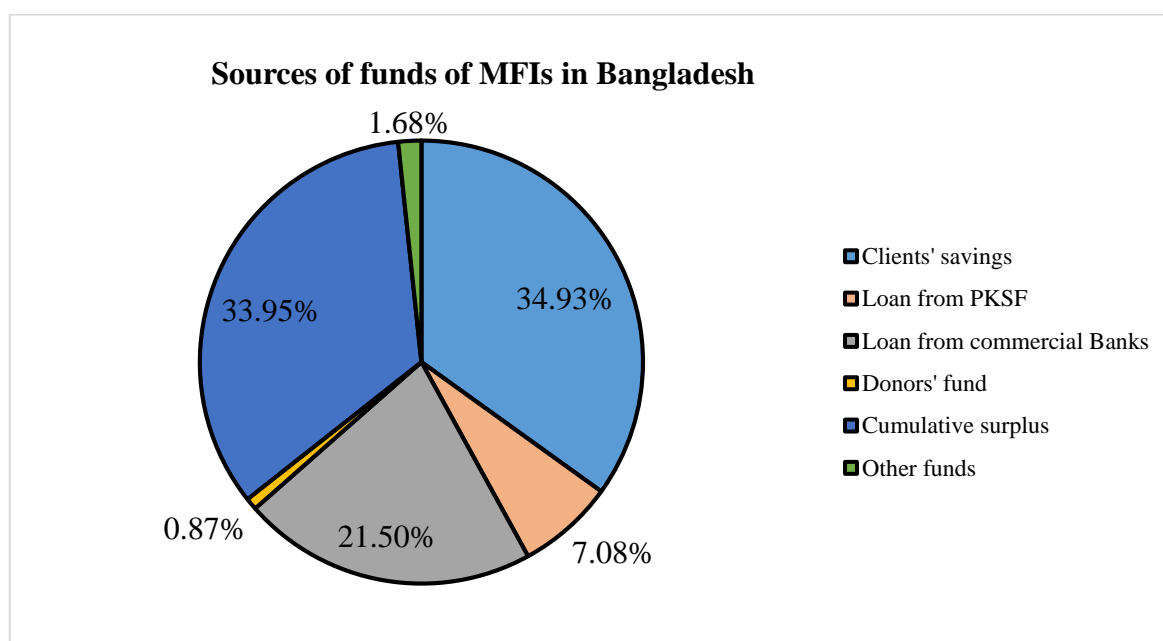
Source: Dhaka Chamber of Commerce & Industry (DCCI), 2017.

Appendix 3



Source: BBS (2017).

Appendix 4



Source: MRA (2017)

Appendix 5

Table 5.7 Demographic information of the respondents

Variables	Category	Percent
Age	18-39	58.9%
	40-49	23.5%
	50-59	16.1%
	60 or above	1.4%
Women's education	No education	34%
	Primary school	31.2%
	High school	31.2%
	College/others	3.5%
Husband's education	No education	29.8%
	Primary school	34.6%
	High school	28.7%
	College/others	7.0%
Number of children	1-2	31.4%
	3-4	52.3%
	5-6	13.4%
	7 or above	2.8%
Household size	1-3	7.4%
	4-6	70.9%
	7 or above	21.8%

Appendix 6

Table 5.8 Amount of loan received and area of the respondents

Amount of loan (BDT)	First loan	Current loan	Area and current loan		
			Rural	Semi-urban	Urban
5000 or Less	36.1%	0.0%	0.0%	0.0%	0.0%
5001-10000	23.2%	3.9%	3.58%	5.1%	1.61%
10001-20000	25.6%	15.8%	18.8%	16.7%	9.70%
20001-30000	6.3%	13.0%	15.3%	10.9%	14.5%
30001-40000	1.1%	10.2%	10.6%	10.9%	8.10%
40001-50000	2.8%	12.3%	7.0%	13.8%	16.1%
50001-60000	1.1%	7.7%	8.2%	7.97%	6.50%
60001-70000	0.0%	7.0%	8.2%	7.25%	4.83%
70001-80000	0.4%	4.6%	7.0%	2.90%	4.83%
80001-90000	0.0%	1.4%	2.35%	1.45%	0.0%
90001-100000	0.4%	5.3%	3.52%	6.52%	4.83%
More than 100000	3.2%	18.9%	15.3%	16.7%	29.0%
Total	100%	100%	100%	100%	100%

Appendix 7

Table 5.9 Organisational characteristics of respondents

Variables	Categories		Area		
			Rural	Semi-urban	Urban
Membership with MFIs	Less than 1 year	3.2%	2.3%	5.07%	0.0%
	1 to 2 years	10.2%	12.9%	7.9%	11.3%
	2 to 3 years	5.6%	10.6%	1.45%	8.1%
	3 to 4 years	7.4%	10.6%	6.52%	4.83%
	4 to 5 years	6.0%	4.7%	5.8%	8.1%
	More than 5 years	67.7%	58.8%	73.2%	67.7%
Name of MFIs	GB	73.3%	64.7%	76.1%	79%
	BRAC	26.9%	35.3%	23.9%	21%
Entrepreneurs	Women	35.8%	40%	39.9%	21%
	Men	40.4%	27%	44.2%	50%
	Nobody	23.9%	32.9%	15.9%	29%
Loan type	Micro-enterprise loan	82.7%	78.8%	88.4%	75.8%
	Livestock loan	4.2%	1.18%	2.9%	11.3%
	Agricultural loan	3.2%	4.7%	3.62%	0.0%
	Housing loan	4.9%	4.7%	3.62%	8.1%
	Education loan	0.7%	1.18%	0.0%	1.61%
	Abroad loan	4.2%	9.41%	1.45%	3.22%

Appendix 8

Table 5.10 Women's savings before and after

Women's normal Savings	Before microfinance	After microfinance
Yes	19.3%	95.4%
No	80.7%	4.6%
Women's fixed savings	0.0%	45.1%

Appendix 9

Table 5.11 Household income, savings and area

Items	Yes	No	Area		
			Rural	Semi-urban	Urban
Increase in household income	74%	26%	71.8%	79%	66.1%
Increase in women's savings	54.7%	45.3%	45.9%	58.7%	58.1%

Appendix 10

Table 5.12 Increased abilities after joining MFIs

Items	Strongly disagree	disagree	Neither disagree nor agree	Agree	Strongly agree
Increased my assets (land)	66.3%	14.4%	3.5%	8.8%	7.0%
Increased my assets (Non-agricultural land, furniture, vehicles, gold)	43.7%	10.2%	3.5%	31%	11.6%
Increased my house (Purchase and refurbishment)	43.9%	13.7%	4.6%	21.8%	16.1%
Increased poultry and livestock	34.7%	11.6%	20.7%	25.3%	7.7%
Increased self-confidence	2.5%	1.8%	0.4%	30.5%	64.9%
Improved my communication skills	2.1%	1.4%	1.1%	31.2%	64.2%
Improved my literacy skills	5.6%	5.3%	0.7%	27.4%	61.1%

Appendix 11

Table 5.13 Control over finances after joining MFIs

Items	Strongly disagree	disagree	Neither disagree nor agree	Agree	Strongly agree
I have regular personal spending money	51.6%	8.4%	0.4%	18.2%	21.4%
I have money for emergency use	48.1%	7.0%	0.7%	21.8%	22.5%
I can spend as I wish	12.6%	36.1%	10.9%	31.6%	8.8%
I can purchase daily food preparation items (Kerosine oil, cooking oil, spices)	9.5%	3.5%	1.8%	56.5%	28.8%
I can purchase ice-cream or sweets for the children	7.7%	22.8%	10.2%	47.7%	11.6%
I can keep my own wage earnings	24.2%	10.9%	27.7%	22.8%	14.4%
I can keep my husband or children's wage earning	20.7%	26.7%	14.0%	26%	12.6%
I can buy clothes for my children	10.2%	37.5%	9.8%	32.3%	10.2%
I can buy clothes for myself	10.5%	40%	9.5%	31.2%	8.8%
I have control over loan use	11%	33.9%	0.0%	32.3%	23.2%
I can save money in my account	4.6%	14%	0.0%	53.0%	28.4%

Appendix 12

Table 5.14 Increase in women's control over finances and amount of loan

Items	Likelihood ratio Chi-square test
I have regular personal spending money	χ^2 (10, n= 285) =14.04 p= .171
I have money for emergency use	χ^2 (10, n= 285)= 8.51 p= .578
I can spend as I wish	χ^2 (10, n= 285)= 10.16 p= .426
I can purchase daily food preparation items (Kerosine oil, cooking oil, spices)	χ^2 (10, n=285)= 11.72 p=.304
I can purchase ice-cream or sweets for the children	χ^2 (10, n=285)= 15.84 p=.104
I can keep my own wage earnings	χ^2 (10, n=285)= 9.97 p=.443
I can keep my husband or children's wage earning	χ^2 (10, n=285)= 5.65 p=.843
I can buy clothes for my children	χ^2 (10, n=285)= 12.37 p=.260
I can buy clothes for myself	χ^2 (10, n=285)= 13.43 p=.201
I have control over loan use	χ^2 (5, n=285)= 43.33 p=.001
I can save money in my account	χ^2 (5, n=285)= 29.45 p=.001

Appendix 13

Table 5.15 Increase in women's control over finances and area of the respondents

Items	Likelihood ratio Chi-square test
I have regular personal spending money	χ^2 (4, n= 285) =3.42 p= .490
I have money for emergency use	χ^2 (4, n= 285)=7.55 p= .109
I can spend as I wish	χ^2 (4, n= 285)= 9.18 p= .057
I can purchase daily food preparation items (Kerosine oil, cooking oil, spices)	χ^2 (4, n=285)= 10.99 p=.027
I can purchase ice-cream or sweets for the children	χ^2 (4, n=285)= 17.88 p=.001
I can keep my own wage earnings	χ^2 (4, n=285)= 18.59 p=.001
I can keep my husband or children's wage earning	χ^2 (4, n=285)= 11.69 p=.020
I can buy clothes for my children	χ^2 (4, n=285)= 21.20 p=.001
I can buy clothes for myself	χ^2 (4, n=285)= 17.02 p=.002
I have control over loan use	χ^2 (2, n=285)= 3.29 p=.193
I can save money in my account	χ^2 (2, n=285)= 18.67 p=.001

Appendix 14

Table 5.16 Kruskal-Wallis test on women's control over finances and amount of loan

Items	Kruskal-Wallis test
I have regular personal spending money	χ^2 (5, n= 285) =10.68 p= .058
I have money for emergency use	χ^2 (5, n= 285)= 2.25 p= .762
I can spend as I wish	χ^2 (5, n= 285)= 4.62 p= .463
I can purchase daily food preparation items (Kerosine oil, cooking oil, spices)	χ^2 (5, n=285)= 5.66 p=.341
I can purchase ice-cream or sweets for the children	χ^2 (5, n=285)= 5.97 p=.308
I can keep my own wage earnings	χ^2 (5, n=285)= 1.49 p=.913
I can keep my husband's or children's wage earning	χ^2 (5, n=285)= 2.52 p=.774
I can buy clothes for my children	χ^2 (5, n=285)= 8.73 p=.120

I can buy clothes for myself	χ^2 (5, n=285)= 10.16	p=.071
I have control over loan use	χ^2 (5, n=285)= 43.85	p=.001
I can save money in my account	χ^2 (5, n=285)= 32.96	p=.001

Appendix 15

Table 5.17 Kruskal-Wallis test on women's control over finances and area of the respondents

Items	Kruskal-Wallis test	
I have regular personal spending money	χ^2 (2, n= 285) = 1.97	p= .373
I have money for emergency use	χ^2 (2, n= 285)= 4.68	p= .096
I can spend as I wish	χ^2 (2, n= 285)= 3.45	p= .178
I can purchase daily food preparation items (Kerosine oil, cooking oil, spices)	χ^2 (2, n=285)= 4.41	p=.110
I can purchase ice-cream or sweets for the children	χ^2 (2, n=285)= 14.58	p=.001
I can keep my own wage earnings	χ^2 (2, n=285)= 4.69	p=.096
I can keep my husband's or children's wage earning	χ^2 (2, n=285)= 5.56	p=.062
I can buy clothes for my children	χ^2 (2, n=285)= 13.00	p=.002
I can buy clothes for myself	χ^2 (2, n=285)= 7.01	p=.030
I have control over loan use	χ^2 (2, n= 285) = 3.31	p= .191
I can save money in my account	χ^2 (2, n= 285)= 18.57	p= .001

Appendix 16

Table 6.4 Agency of women's decision-making after joining MFIs

Items	Strongly disagree	disagree	Neither disagree nor agree	Agree	Strongly agree
I have a say on use of household income	2.1%	23.5%	20%	45.3%	9.1%
I have a say on applying for a loan	47.7%	9.1%	1.1%	22.5%	19.6%
I have a say on working outside home	52.6%	9.1%	2.1%	17.5%	18.6%
I have a say on buying furniture	11.9%	5.3%	3.2%	54%	25.6%
I have a say on treatment of my sick children/myself	23.9%	4.6%	3.5%	39.6%	28.4%
I have a say on visiting father's home	45.3%	6.7%	3.2%	22.8%	22.1%
I have a say on family planning	27.4%	15.8%	8.8%	30.9%	17.2%
I have a say on buying or selling property/livestock	13%	9.5%	16.8%	40.4%	20.4%

Appendix 17

Table 6.5 Women's Mobility after joining MFIs

Items	Strongly disagree	disagree	Neither disagree nor agree	Agree	Strongly agree
I can visit friends outside the village	55.4%	7.0%	2.5%	24.2%	10.9%
I can visit market alone	42.5%	5.6%	2.1%	27.7%	22.1%
I can visit hospital and clinic alone	23.9%	4.6%	3.5%	39.6%	28.4%

Appendix 18

Table 6.6 Women's community and political participation after joining MFIs

Items	Yes	No
I have participated in shalish	31.9%	68.1%
I have a membership of at least one committee	11.6%	88.4%
I have participated in collective action	45.3%	54.7%
I have voted in last local election	87.4%	12.6%
I have campaigned in last local election	11.9%	88.1%
I have interacted with local government officials	4.9%	95.1%
I have interacted with local political representatives	64.6%	35.4%
I know the name of the local member of parliament	64.9%	35.1%
I know the name of prime minister	26.7%	73.3%

Appendix 19

Table 6.7 Increase in women's agency in decision-making and amount of loan

Items	Likelihood ratio Chi-square test
I have a say on use of household income	$\chi^2 (10, n= 285) =13.84$ $p= .185$
I have a say on applying for a loan	$\chi^2 (10, n= 285) =11.65$ $p= .309$
I have a say on working outside home	$\chi^2 (10, n= 285) =11.11$ $p= .349$
I have a say on buying furniture	$\chi^2 (10, n= 285) =8.31$ $p= .598$
I have a say on treatment of my sick children	$\chi^2 (10, n= 285) =8.88$ $p= .543$
I have a say on visiting father's home	$\chi^2 (10, n= 285) =7.75$ $p= .653$
I have a say on family planning	$\chi^2 (10, n= 285) =9.34$ $p= .50$
I have a say on buying or selling property/livestock	$\chi^2 (10, n= 285) =18.91$ $p= .041$

Appendix 20

Table 6.8 Increase in women's agency in decision-making and area of the respondents

Items	Likelihood ratio Chi-square test
I have a say on use of household income	χ^2 (4, n= 285) =4.96 p= .291
I have a say on applying for a loan	χ^2 (4, n= 285) =8.65 p= .070
I have a say on working outside home	χ^2 (4, n= 285) =4.93 p= .294
I have a say on buying furniture	χ^2 (4, n= 285) =9.87 p= .043
I have a say on treatment of my sick children	χ^2 (4, n= 285) =22.03 p= .001
I have a say on visiting father's home	χ^2 (4, n= 285) =5.64 p= .227
I have a say on family planning	χ^2 (4, n= 285) =10.31 p= .041
I have a say on buying or selling property/livestock	χ^2 (4, n= 285) =17.30 p= .002

Appendix 21

Table 6.9 Increase in women's mobility and amount of loan

Items	Likelihood ratio Chi-square test
I can visit friends outside the village	χ^2 (10, n= 285) =7.32 p= .695
I can visit market alone	χ^2 (10, n= 285) =11.18 p= .343
I can visit hospital and clinic alone	χ^2 (10, n= 285) =8.88 p= .543

Appendix 22

Table 6.10 Increase in women's mobility and area of respondents

Items	Likelihood ratio Chi-square test
I can visit friends outside the village	χ^2 (4, n= 285) =8.36 p= .079
I can visit market alone	χ^2 (4, n= 285) =28.96 p= .001
I can visit hospital and clinic alone	χ^2 (4, n= 285) =22.03 p= .001

Appendix 23

Table 6.11 Increase in community and political participation and amount of loan

Items	Likelihood ratio Chi-square test
I have participated in shalish	χ^2 (5, n= 285) =8.68 p= .122
I have a membership of at least one committee	χ^2 (5, n= 285) =1.10 p= .953
I have participated in collective action	χ^2 (5, n= 285) =16.30 p= .006
I have voted in last local election	χ^2 (5, n= 285) =8.75 p= .119
I have campaigned in last local election	χ^2 (5, n= 285) =.704 p= .983
I have interacted with local government officials	χ^2 (5, n= 285) =1.50 p= .912
I have interacted with local political representatives	χ^2 (5, n= 285) =3.26 p= .660
I know the name of the local member of parliament	χ^2 (5, n= 285) =3.29 p= .655
I know the name of prime minister	χ^2 (5, n= 285) =12.50 p= .028

Appendix 24

Table 6.12 Increase in community and political participation and area of the respondents

Items	Likelihood ratio Chi-square test
I have participated in shalish	$\chi^2 (2, n= 285) =5.49$ p= .064
I have a membership of at least one committee	$\chi^2 (2, n= 285) =1.40$ p= .496
I have participated in collective action	$\chi^2 (2, n= 285) =10.77$ p= .005
I have voted in last local election	$\chi^2 (2, n= 285) =12.41$ p= .002
I have campaigned in last local election	$\chi^2 (2, n= 285) =.761$ p= .683
I have interacted with local government officials	$\chi^2 (2, n= 285) =.604$ p= .739
I have interacted with local political representatives	$\chi^2 (2, n= 285) =.346$ p= .841
I know the name of the local member of parliament	$\chi^2 (2, n= 285) =7.59$ p= .022
I know the name of prime minister	$\chi^2 (2, n= 285) =3.89$ p= .143

Appendix 25

Table 6.13 Kruskal-Wallis test on women's agency in decision-making and amount of loan

Items	Kruskal-Wallis test
I have a say on use of household income	$\chi^2 (5, n= 285) = 3.71$ p= .591
I have a say on applying for a loan	$\chi^2 (5, n= 285) =7.70$ p= .174
I have a say on working outside home	$\chi^2 (5, n= 285) =3.94$ p= .557
I have a say on buying furniture	$\chi^2 (5, n= 285) =5.86$ p= .319
I have a say on treatment of my sick children	$\chi^2 (5, n= 285) =6.78$ p= .237
I have a say on visiting father's home	$\chi^2 (5, n= 285) =.938$ p= .967
I have a say on family planning	$\chi^2 (5, n= 285) =3.62$ p= .605
I have a say on buying or selling property/livestock	$\chi^2 (5, n= 285) =11.40$ p= .044

Appendix 26

Table 6.14 Kruskal-Wallis test on women's agency in decision-making and area of the respondents

Items	Kruskal-Wallis test
I have a say on use of household income	$\chi^2 (2, n= 285) =.437$ p= .804
I have a say on applying for a loan	$\chi^2 (2, n= 285) =4.46$ p= .107
I have a say on working outside home	$\chi^2 (2, n= 285) =.412$ p= .814
I have a say on buying furniture	$\chi^2 (2, n= 285) =3.98$ p= .137
I have a say on treatment of my sick children	$\chi^2 (2, n= 285) =11.51$ p= .003
I have a say on visiting father's home	$\chi^2 (2, n= 285) =2.25$ p= .324
I have a say on family planning	$\chi^2 (2, n= 285) =1.00$ p= .60
I have a say on buying or selling property/livestock	$\chi^2 (2, n= 285) =8.04$ p= .018

Appendix 27

Table 6.15 Kruskal-Wallis test on women's mobility and amount of loan

Items	Kruskal-Wallis test
I can visit friends outside the village	$\chi^2 (5, n= 285) =2.09$ $p= .836$
I can visit market alone	$\chi^2 (5, n= 285) =5.90$ $p= .315$
I can visit hospital and clinic alone	$\chi^2 (5, n= 285) =6.78$ $p= .237$

Appendix 28

Table 6.16 Kruskal-Wallis test on women's mobility and area of the respondents

Items	Kruskal-Wallis test
I can visit friends outside the village	$\chi^2 (2, n= 285) =2.50$ $p= .285$
I can visit market alone	$\chi^2 (2, n= 285) =24.16$ $p= .001$
I can visit hospital and clinic alone	$\chi^2 (2, n= 285) =11.51$ $p= .003$

Appendix B: Questionnaire

The impact of microfinance on women empowerment: Cases of two microfinance institutions of Bangladesh

Faculty of Business, University of Plymouth, United Kingdom

Dear Participant,

Thank you for taking time to read this information sheet.

You are invited to take part in a research about whether MFIs are able to make an impact on women empowerment. The researcher, ABM Golam Mostafa is working towards a PhD in Business and Management at the University of Plymouth in the United Kingdom. Before you take part in this research, please read the following information carefully and do not hesitate to ask questions if anything is not clear or if you would like to have additional information. Take time to decide whether you wish to participate.

Who will conduct the research? ABM Golam Mostafa, PhD Candidate, University of Plymouth

What are the objectives of this research?

- To determine the impact of microfinance in increasing women's empowerment in economic dimension.
- To determine the impact of microfinance in increasing women's empowerment in social dimension.
- To determine the impact of microfinance in increasing women's empowerment in political dimension.

What would I be asked to do if I took part?

You will be asked to complete a brief questionnaire with the researcher and his assistant, which investigates your livelihood before and after joining the microfinance institutions. The process will not exceed an hour.

What happens to the information collected?

The information will be compared with information collected from other sources and methods. It will constitute the basis of the doctoral research project and academic journal articles as well as other reports. Quotations could be included in these documents but participants' name and identity will not be disclosed in the thesis, journal articles and other reports. Participants will be referred to in general terms, profession or official titles.

How is confidentiality maintained?

The researcher and research assistant guarantee the confidentiality of information disclosed. Information will be anonymized as soon as possible and participants' names and identity will be coded and stored separately on a password protected files. A careful coding and indexing system will be used so that it is impossible to link information to its source. All the recordings will be destroyed as soon as relevant information has been transcribed.

What happens if I do not want to take part or if I change my mind?

If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to participate you will still be free to stop the process at any time without giving a justification and without any loss or harm to yourself.

Will I be paid for participating in the research? There is no payment for participating in the research. The researcher is however happy to share the outcomes of the study up on request.

Contact for further information: PhD Researcher: **ABM Golam Mostafa**, Mobile (Bangladesh): 01744502888, Email address: abm.mostafa@plymouth.ac.uk

If you would like to make a complaint or ask any question about the research, please contact my director of studies, Professor Peijie Wang, Room 217, Cookworthy Building, Plymouth, PL4 8AA. Phone: 00441752585705, Email: peijie.wang@plymouth.ac.uk.

If you agree to participate in the questionnaire please read and sign this form:

- I affirm that I have read the attached information sheet on the above research and had the chance to consider them and make inquiries and had these addressed satisfactorily.
- I comprehend that my participation in this research is voluntary and that I can withdraw whenever without giving a reason and with no impairment to myself.
- I consent to any data collected being used by other researchers who are involved in the same project
- I consent to the use of anonymous quotes
- I consent to take part in the above project.

.....
Signature or initials of the participant Date
.....

Name of the person taking consent

Date

Important terms you need to know to help you answer the questions:

Economic empowerment is expressed as the achievement of control over resources. It also refers to the capacity to participate, opportunities to contribute and benefit from the growth process within the economic context. Economic empowerment amplifies women's access to economic resources such as access to loans, grants and savings. It also includes business management and skills development training as non-financial services. Furthermore, it facilitates women engagement in the job market through the availability of market information.

Social empowerment refers to an individual's approach building up a feeling of autonomy and self-confidence, their right to determine choices within the family and community, acting independently and collectively in order to change any social settings if necessary.

Political empowerment illustrates the engagement of people with the political process of a country in terms of knowledge about political parties and important policies. It also includes the interaction with local administration and elected representatives, as well as, campaign and participation in local or national elections.

Part A-Demographic Profile

Kindly tick (✓) the appropriate answers.

A1- Which of the following age brackets do you fall in to?

- ☐ Below 18
- ☐ 18-29
- ☐ 40-49
- ☐ 50-59
- ☐ 60 or above

A2- What is your household size?

- ☐ 1-3
- ☐ 4-6
- ☐ 7 or above

A3- How many children do you have?

- ☐ 1-2
- ☐ 3-4
- ☐ 5-6
- ☐ 7 or above

A4- What educational qualification do you have?

- ☐ Primary School
- ☐ High School
- ☐ College
- ☐ Others (Please Specify.....)

A5- What educational qualification do your husband have?

- ☐ Primary School
- ☐ High School
- ☐ College
- ☐ Others (Please specify.....)

A6- What is the length of your membership with the MFIs?

- ☐ Less than 1 year
- ☐ 1 to 2 years
- ☐ 2 to 3 years
- ☐ 3 to 4 years
- ☐ 4 to 5 years
- ☐ More than 5 years

Part B-Personal Finance, Asset and Income

B1- Did you have any personal savings before you applied microfinance loan?

- ☐ Yes
- ☐ No

B2- Did you have any bank account before you applied microfinance loan?

- ☐ Yes
- ☐ No

B3- How much was your household's monthly income before you applied for the microfinance loan? (In BDT)

- ☐ No income
- ☐ Less than 5000
- ☐ 5001-10000
- ☐ 10001-15000
- ☐ 15001-20000
- ☐ More than 20000

B4- Did you own any assets before you applied for the microfinance loan? You can tick more than one option.

- ☐ Agricultural Land
- ☐ Livestock
- ☐ Houses
- ☐ Vehicles
- ☐ Gold Jewellery
- ☐ Others (Please Specify.....)

B5- If you own any land, what is the size of it?

- ☐ Less than 0.5 acre
- ☐ 0.5 -1 acre
- ☐ 1.5- 2 acre
- ☐ 2.5- 3 acre
- ☐ Others (Please Specify.....)

Part C- Provision of Financial Products and Services by MFIs

Kindly tick (✓) the appropriate answer.

C1- Before going to MFIs, did you approach other commercial banks for loan? (If NO, go to question C4)

- ☐ Yes

☐ No

C2- Did you receive any loan from the commercial banks? (If yes, go to question B4)

☐ Yes

☐ No

C3- What were the reasons for refusal? You can tick more than one option

☐ I did not have any collateral

☐ I did not have any credit history

☐ I am a woman

☐ Others (Please specify.....)

C4- What was the amount of your first microfinance loan? (In BDT)

☐ 5000 or less

☐ 5001-25000

☐ 25001-50000

☐ 50001-75000

☐ 75001-100000

☐ More than 100000

C5- What is the amount of your current microfinance loan?

☐ 5000 or less

☐ 5001-25000

☐ 25001-50000

☐ 50001-75000

☐ 75001-100000

☐ More than 100000

C6- What was your loan type?

☐ Micro-enterprise loan

☐ Vegetable loan

☐ Livestock loan

☐ Agricultural loan

☐ Housing loan

☐ Education loan

☐ Others (Please specify.....)

C7- Was it a group loan?

☐ Yes

☐ No

C8- Which MFI did you receive your loan from?

- ☐ Grameen Bank
☐ BRAC
☐ Both

C9- What was the interest rate on the loans?

- ☐ 0.1% - 9.9%
☐ 10% - 24%
☐ 25% - 49%
☐ 50% - 99%
☐ 100%+

C10- How did you use your loan? (You can tick more than one option in the table below).

I have spent to repay another loan	
I have spent on farming (food crops)	
I have spent on petty trading in agricultural products	
I have spent on petty trading in consumer products	
I have spent on sewing/dressmaking	
I have spent on cows/goats rearing	
I have spent on farming (Poultry)	
I have spent on daily consumption	
Loan was seized by my husband	
Loan was used by husband or another family member	
Others (Please specify.....)	

C11- How much is your household's monthly income now? (In BDT)

- ☐ Less than 5000
☐ 5001- 10000
☐ 10001- 15000
☐ 15001- 20000
☐ More than 20000
☐ No income

C12- Is there any condition given by the MFI prior to deliver approve the loan?

- ☐ Yes
☐ No

C13- If yes, what conditions are given by the MFIs to be eligible for the loan? You can choose more than one option.

- ☐ Opening savings account
- ☐ Sufficient collateral
- ☐ Repayment capacity
- ☐ Credit history
- ☐ Viable business plan
- ☐ Others (Please specify.....)

C14- How do you pay your instalment to repay the loan?

- ☐ Weekly
- ☐ Monthly
- ☐ Other

C15- Where do you get the money to pay your instalment?

- ☐ From family and friends
- ☐ From my business profit
- ☐ From the loan of another MFI
- ☐ Others (Please specify.....)

C16- Do you face any difficulties to pay the instalment in terms of duration? You can tick more than one option.

- ☐ Yes, when I pay weekly
- ☐ Yes, when I pay monthly
- ☐ Both
- ☐ No

C17- Did you ever fail to pay your instalment? (If yes, go to C18)

- ☐ Yes
- ☐ No

C18- How many times you have failed to make your instalment in last three months?

- ☐ One time
- ☐ Two times
- ☐ Three or more than three times

C19- Did you face any abuse from your group members when you have missed the instalment?

- ☐ Yes
- ☐ No

Part D- Women's Entrepreneurship

Kindly tick (✓) the appropriate answers.

D1- What kind of business are you engaged with?

- ☐ Tea stall
- ☐ Grocery
- ☐ Farming
- ☐ Poultry
- ☐ Raising Livestock
- ☐ Sewing
- ☐ Beauty parlours
- ☐ Invest on other people's business
- ☐ Lending to others with interest
- ☐ Others (Please specify.....)

D2- What are the sources of start-up capital for your business? You can tick more than one option.

- ☐ Self-funded
- ☐ Loans from friends, family and neighbours
- ☐ Loans from informal moneylenders
- ☐ Loans from commercial banks
- ☐ Loans from Grameen bank
- ☐ Loans from BRAC
- ☐ Not applicable

D3- Did you receive any financial literacy sessions from MFIs?

- ☐ Yes
- ☐ No

D4- Did you receive any skills development training for setting up the enterprise from MFIs?

- ☐ Yes
- ☐ No

D5- If yes to either (D3) or (D4) which MFI did you receive financial literacy sessions or skills development training from?

Items	Grameen bank	BRAC
I have received financial literacy sessions		
I have received skills development training		

D6- To what extent do you agree or disagree to the following statements:

Items	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Financial literacy sessions facilitates the operation of microenterprise	1	2	3	4	5
Skills development training facilitates the operation of microenterprise	1	2	3	4	5

D7- How many people do you employ?

- ☐ 1
☐ 2-3
☐ 4-5
☐ 6-9
☐ More than 9
☐ Not applicable

D8- In which areas do you spend most of the microfinance loan in Business? (You can tick more than one option)**D9- What percentage of your loan is used in following areas?**

Items	D8 (You can tick more than one option)	D9				
		1%-20%	21%-40%	41%-60%	61%-80%	81%-100%
Purchase of equipment						
Purchase of raw materials						
Initial operating cost						
To clear business debts						
Hiring labour						
Others (Please specify.....)						

D10- To what extent do you agree or disagree to the following statements? Access to loan has helped me to:

Items	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Increase my household income	1	2	3	4	5
Increase my savings	1	2	3	4	5
Increased my assets (agricultural land)	1	2	3	4	5
Increase my assets (non-agricultural land, gold, vehicle)	1	2	3	4	5
Increase house (Purchase, improvement and refurbishment)	1	2	3	4	5
Increase poultry and livestock	1	2	3	4	5
Increase employee in my business	1	2	3	4	5
Increase the chance of obtaining business loans from commercial banks	1	2	3	4	5
Improve my self-confidence	1	2	3	4	5
Improve my communication skills	1	2	3	4	5
Improve my financial management and computation skills	1	2	3	4	5
Other (Please specify.....)	1	2	3	4	5

Part E- Women's Economic, Social and Political Empowerment

E1- Control over minor finances

To what extent do you agree or disagree to the following statements:

Items	Strongly disagree	Disagree	Neither agree nor disagree	agree	Strongly agree
I have regular personal spending money	1	2	3	4	5
I can keep money from sale of livestock produce/poultry	1	2	3	4	5
I have money for emergency use	1	2	3	4	5

I can spend as I wish	1	2	3	4	5
I can purchase daily food preparation items (Kerosine oil, cooking oil, spices)	1	2	3	4	5
I can purchase ice-cream or sweets for the children	1	2	3	4	5

E2- Control over major finances

To what extent do you agree or disagree to the following statements:

Items	Strongly disagree	Disagree	Neither agree nor disagree	agree	Strongly agree
I can keep my own wage earnings	1	2	3	4	5
I can keep my husband or children's wage earning	1	2	3	4	5
I can buy clothes for my children	1	2	3	4	5
I can buy clothes for myself	1	2	3	4	5

E3- Decision-making

To what extent do you agree or disagree to the following statements:

Items	Strongly disagree	Disagree	Neither agree nor disagree	agree	Strongly agree
I have a say in using household income and savings	1	2	3	4	5
I have a say in applying for a loan	1	2	3	4	5
I have a say in working outside home	1	2	3	4	5
I have a say in buying furniture	1	2	3	4	5
I have a say in schooling of my children	1	2	3	4	5
I have a say in house repair and renovation	1	2	3	4	5
I have a say in treatment of my sick children	1	2	3	4	5
I have a say in visiting doctor for myself	1	2	3	4	5
I have a say in my children's marriage	1	2	3	4	5
I have a say in visiting father's home	1	2	3	4	5
I have a say in using family	1	2	3	4	5

planning					
I have a say in buying or selling livestock	1	2	3	4	5

E4- Mobility

To what extent do you agree or disagree to the following statements:

Items	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I can visit friends outside the village	1	2	3	4	5
I can visit market alone	1	2	3	4	5
I can visit hospital and clinic alone	1	2	3	4	5

E5- Community participation- After joining MFIs:

Items	Yes	No
I have Participated in shalish after joining MFIs	1	2
I have a membership of at least one village committee	1	2
I have accompanied others to government offices	1	2
I am consulted by others	1	2
I have participated in collective action	1	2

E6- Political participation- After joining MFIs:

Items	Yes	No
I have voted in last local election	1	2
I have campaigned in last election	1	2
I have interacted with local administration	1	2
I have interacted with elected officials	1	2
I am consulted by elected officials	1	2

Thank you for your participation.

Appendix C: Ethical Approval



Ref: FREC1617.61
Date: 4 October, 2017

ABM Golam Mostafa,

Ethical Approval Application No: FREC1617.61

Title: The impact of microfinance on women empowerment: Cases of two microfinance institutions of Bangladesh

The Faculty Research Ethics Committee has considered the ethical approval form and is fully satisfied that the project complies with Plymouth University's ethical standards for research involving human participants.

Approval is for the duration of the project. However, please resubmit your application to the committee if the information provided in the form alters or is likely to alter significantly.

We would like to wish you good luck with your research project.

Yours sincerely

(Sent as email attachment)

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